

AFR 110-14
USAF AIRCRAFT
ACCIDENT
INVESTIGATION
BOARD

24 JUNE 94
FAIRCHILD AFB, WA

B-52H AIRCRAFT
S/N 61-0026

VOL 1

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INVESTIGATION OFFICER
MICHAEL G. MCCONNELL, COL, USAF

HQ
12TH AIR FORCE

COPY NUMBER 80 OF

**DEPARTMENT OF THE AIR FORCE
HEADQUARTERS TWELFTH AIR FORCE (ACC)
DAVIS-MONTHAN AIR FORCE BASE, ARIZONA**


MEMORANDUM FOR 12 AF/JA

12 SEP 1994

FROM: HQ 12 AF/CC
5430 E. Gafford Way, STE 132
Davis-Monthan AFB AZ 85707-4250

SUBJ: Aircraft Accident Investigation: 24 Jun 94, B-52H, SN61-0026, 92BW (325BS),
Fairchild AFB WA

Subject aircraft accident investigation is approved.



THOMAS R. GRIFFITH
Lieutenant General, USAF
Commander

**Executive Summary
Accident Investigation Report
B-52H, SN 61-0026
Fairchild AFB, Washington
5 September 1994**

On 24 June 1994, Czar 52, a B-52H assigned to the 325th Bomb Squadron, 92d Bomb Wing, Fairchild AFB, WA, launched at approximately 1358 hours Pacific Daylight Time (PDT), to practice air show maneuvers for the upcoming 26 June 1994 Fairchild AFB, WA airshow. The aircrew flew a planned profile that exceeded authorized flight maneuvers. At the end, the aircraft rolled out on a short final approach for landing. The crew executed a missed approach because an aircraft was on the runway executing a touch-and-go landing. At mid-field, the B-52 began a tight 360° turn around the airfield tower at about 250 feet AGL, with over 60° of bank, replicating one of the profile turns. Regulations authorized 30° of bank. Approximately three-quarters of the way through the turn the aircraft reached 90° of bank, stalled, lost altitude, and impacted the ground. Impact occurred at 1416 hours PDT at approximately a 95° bank angle and 150 knots indicated air speed (KIAS.)

Aircraft maintenance, weather and aircrew medical condition were not factors in this accident. The board focused on the airmanship and historical flying behavior of the crew. Several senior officers described the pilot as a professional, knowledgeable aviator. Some crew members related their belief that the pilot was the most experienced and knowledgeable pilot in the wing. However, many of the same individuals gave the board examples of the pilot's airmanship that they characterized as excessively aggressive and often in violation of existing regulations. Some crew members refused to fly with the pilot because of his lack of air discipline. In its investigation of a more than three year period, the board found several instances of the pilot flying in violation of USAF, ACC, and FAA regulations. In spite of performance characterized by poor airmanship, wing leaders took no significant corrective action. During this three year period there were four wing commanders, three vice wing commanders, three operations group commanders (or equivalents) and five squadron commanders.

Testimony to the board on the airmanship of the other crew members revealed no adverse comments.

After extensive witness interviews and analysis of video data, tower tapes and other records, the board concluded there was clear and convincing evidence of multiple causes for this accident.

The board determined that pilot error was a cause. The pilot violated regulatory provisions, flight manual guidance and guidance from the wing commander placing the aircraft outside established flight parameters at an attitude and altitude where recovery was not possible. Furthermore, the accident crew, not recognizing the developing dangerous situation, allowed the pilot to enter into a stalled condition.

The board also determined that "leadership and supervision" was a cause. The pilot had a history of excessively aggressive flying and poor airmanship. The frequently changed wing leadership did not recognize this pattern of behavior. The 92d Wing Commander and his staff lacked an adequate understanding of regulations concerning air shows and maneuvering angles permitted in the traffic pattern. The 92d Operations Group Commander (OG/CC) recommended, and the wing commander approved, airshow maneuvers not complying with the Pilot's Flight Manual and USAF, ACC, and FAA regulations. The 92d OG/CC flew the airshow profile with the mishap pilot previously, did not recognize it was contrary to regulations and air discipline, and did not direct a profile change to bring it into compliance. The maneuver resulting in the accident was a direct extension of that exceedingly aggressive profile.

AIRCRAFT ACCIDENT INVESTIGATION

FORMAL REPORT OF INVESTIGATION

Fairchild AFB, WA 24 June 1994
B-52H Aircraft S/N 61-0026
31 August 1994

1. AUTHORITY AND PURPOSE:

The Commander, Twelfth Air Force, Air Combat Command (ACC), appointed Colonel Michael G. McConnell, Commander, 93 Operations Group, Castle AFB, CA, under Air Force Regulation 110-14, to investigate and determine the facts and circumstances surrounding the aircraft accident involving B-52H aircraft, S/N 61-0026, which occurred on 24 June 1994 at Fairchild AFB, WA. Lieutenant Colonel Kevin J. Nehring, Chief of Aeromedical Services, 93d Medical Group, Castle AFB, CA, was appointed as medical technical advisor. Major Warren A. Montgomery, Operations Officer, 93d Operations Support Squadron, Castle AFB, CA, was appointed as operations technical advisor; Captain Thomas L. Wall, Sortie Generation Flight Commander, 99th Reconnaissance Squadron, Beale AFB, CA, and Master Sergeant Randolph J. Smith, Specialist Flight Superintendent, 2 Support Squadron, Fairchild AFB, WA, were appointed as maintenance technical advisors. Master Sergeant Loren G. St. Hilaire, NCOIC, Egress Element, 2nd Support Squadron, and Sergeant Luis M. Pineiro, Aircrew Life Support Technician, 2nd Support Squadron, Fairchild AFB, WA, were appointed as egress and life support technical advisors; Lieutenant Colonel Michael Colopy, Staff Judge Advocate, 92nd Air Refueling Wing, Fairchild AFB, WA, and Major Donald G. Tyson, Assistant Staff Judge Advocate, 12th Air Force, Davis-Monthan AFB, AZ, were appointed as legal advisors. (Tab Y-1 to Y-8)

The purpose of the investigation was to obtain and preserve all available evidence for claims, litigation, disciplinary and administrative actions, and for all other purposes deemed appropriate by competent authority.

The Commander of Air Combat Command also forwarded a letter, by Mr. Kenneth C. Pearce, through the convening authority, to this aircraft accident board, (Tab AA-12.1 to 12.3) and asked the board to consider the allegations and facts recited in the letter. Mr Pearce wrote that earlier in 1994, Lt Col Mark C. McGeehan, Commander, 325th Bomb Squadron, had asked Col William E. Pellerin, the 92nd Operations Group Commander, to remove Lt Col Arthur A. "Bud" Holland, Chief, 92nd OG Standardization and Evaluation division, from flying status prior to unit inactivation due to his overly aggressive flying style. Recited by Mr Pearce were complaints by 325th Bomb Squadron aircrews of pressure applied by Lt Col Holland to "fly the airplane beyond the scope of training regulations" and "highly questionable" maneuvers being practiced by Lt Col Holland for the 1994 Fairchild AFB air show. Also questioned by Mr Pearce, was the failure of the 92nd Bomb Wing leadership to examine Lt Col Holland's flying record in order to "ensure against any repeat of unsafe, unwarranted flying maneuvers."

2. SUMMARY OF FACTS:

a. History of the Flight.

(1) **Summary of the Flight.** A B-52H Stratofortress aircraft, call sign Czar 52, the Accident Aircraft (AA), launched at approximately 1358 hours Pacific Daylight Time (PDT) on 24 June 1994 to practice air show maneuvers for an upcoming local air show on 26 June 1994. (Tab K-1 and N-14) This was the second of two practice air show training flights. A practice mission similar to the 24 June 1994 mission was flown on 17 June 1994. (Tab V-8.12 and V-8.13)

At the end of the air show exhibition practice, the crew began a visual approach to runway 23. After rolling out on a short final approach for landing, the crew began a missed approach because a KC-135R tanker aircraft (Earl 01) was on the runway executing a touch-and-go landing. At approximately mid-field, the AA began a 360 degree turn around the airfield tower. Approximately three-quarters of the way through the turn the aircraft impacted the ground after reaching a 95 degree bank angle. (Tab A-1 and J-2) A detailed aircraft flight profile is at paragraph 2d below.

(2) **Media Coverage.** The accident generated national and local media coverage. News releases were provided to the public by the 92nd Bomb Wing Public Affairs office, Fairchild AFB, WA. (Tab AA-11.1 to 11.3) Pictures of the crash and crash site were broadcast by national and local television stations. National news wire services also carried news of the crash.

(3) Significant Facts Preceding the Accident Mission.

(a) **Crew members.** Lt Col Arthur A. "Bud" Holland, Chief of Standardization and Evaluation, was the pilot and aircraft commander. Lt Col Holland was attached to the 325th Bomb Squadron for flying purposes. Lt Col Mark C. McGeehan, Commander, 325th Bomb Squadron, was the copilot and Lt Col Kenneth S. Huston, Operations Officer, 325th Bomb Squadron, was the radar navigator. Col Robert E. Wolff, Vice Commander, 92nd Bomb Wing, was sitting in the instructor pilot seat performing observer duties. Col Wolff was also attached to the 325th Bomb Squadron for flying purposes. (Tab K-1, V-8.6, V-8.11, and X-1 to X-5)

Col Wolff did not fly on the 17 June 1994 practice mission. (Tab AA-16.1) He was added to the 24 June 1994 flight mid-morning of the mission day by Col (Brig Gen select) William C. Brooks, the 92nd Bomb Wing Commander. (Tab V-2.30) Col Wolff was asked to give the B-52 exhibition a last review prior to the formal air show on 26 June 1994. (Tab V-2.31 and V-8.18) At the conclusion of the mission, Col Wolff was to be recognized for his extensive service in B-52s by wing personnel. (Tab V-2.30)

(b) **Fairchild AFB Air Show.** The Fairchild AFB air show is an annual event. The 92nd Bomb Wing, in recent years, included flight exhibitions by aircraft that were assigned to the base. The 1994 air show, the last for assigned B-52 aircraft, was scheduled to be held 26 June 1994. The B-52 exhibition profile scheduled to be flown on 26 June 1994 was similar to that of

previous years. This year's B-52 exhibition included one new maneuver, however, it was a climbing 360 degree turn around the airport control tower immediately after takeoff.

(c) Leadership History. The 92nd Bomb Wing experienced numerous changes to its senior wing leadership over the previous three years. The changes included four wing commanders, three vice wing commanders, three deputy commanders for operations/operations group commanders. Three assistant deputy commanders for operations/deputy operations group commanders were replaced. The 325th Bomb Squadron had five squadron commanders in the same time period. A leadership timeline is located at Tab AA-24.1.

(d) Unit Inactivation. On 1 July 1994, the 92nd Bomb Wing transferred to Air Mobility Command and became the 92nd Air Refueling Wing. Simultaneously, the 325th Bomb Squadron was inactivated. The base had one B-52H remaining on-station, the accident aircraft. The wing was no longer attempting to maintain combat readiness of the remaining aircrew personnel. The aircraft was used to keep basic pilot proficiency in traffic pattern operations and for weapons load training.

As of 24 June 1994, most bomber operations and maintenance personnel had drawn down and departed the base. Additionally, the 92nd Bomb Wing Commander, the vice commander, and the 92nd Operations Group Commander were preparing to depart the base for new assignments. The 92nd Deputy Operations Group Commander was being reassigned to the 92nd Medical Group. The 453d Operations Group Commander and his deputy were redesignated as commander and deputy of the 92nd Operations Group. The 92nd Bomb Wing Chief of Safety was moved to a new job on-base. Remaining 92nd Bomb Wing operations and maintenance personnel were reassigned to a new tenant unit at Fairchild, the 2nd Support Squadron. The 2nd Support Squadron's parent unit is the 2nd Logistics Group at Barksdale AFB, LA.

(e) History of the Accident Crew. The airmanship and historical flying behavior of the crew were examined by the board. Several past and present members of the wing expressed their belief to the board that Lt Col Arthur A. Holland pushed too close to the limits of his experience and the aircraft's design capability. (Tab V-21.3, V-25.11, V-26.33, V-28.3, V-32.3, and V-32.16) Some crew members related their belief that Lt Col Holland was the most experienced and knowledgeable pilot in the 92nd Bomb Wing. However, the same individuals gave the board examples of Lt Col Holland's airmanship which they characterized as overly aggressive and often at variance with existing regulations. (Tab V-21.4, V-26.5, and V-28.3) Also, several witnesses claimed that some crew members tried not to fly with Lt Col Holland because of his airmanship. (Tab V-21.6, V-28.4, V-40.10, and V-40.11) Senior wing leadership perceptions of Lt Col Holland were very favorable. He was described by several senior officers as a professional, knowledgeable aviator. (Tab V-1.4, V-2.7 to V-2.8, V-3.3, and V-8.5) Testimony to the board on the airmanship of the other crew members on the flight surfaced no adverse comments. The remaining three crew members were generally considered by the witnesses to be excellent, professional aviators. Lt Col McGeehan and Lt Col Huston were particularly praised. Col Wolff did not fly frequently and was less well-known by the witnesses.

Nine events since 1991 were cited as demonstrating the concern over Lt Col Holland's airmanship. Summaries of the events follow below:

(1) **19 May 1991.** Lt Col Holland piloted the B-52 exhibition in the 1991 Fairchild AFB air show. (Tab V-6.5, V-7.4, V-8.5, and V-8.6) The profile consisted of several high-banked turns (greater than 30 degrees of bank) and a high pitch angle climb to altitude, estimated at over 45 degrees pitch. (Tab AA-25.1) The exhibition also included a loose visual formation with a KC-135 tanker aircraft. (Tab AA-25.1) Both aircraft pitched out from the formation with the KC-135 turning left and the B-52 turning right. (Tab AA-25.1) A pitch out maneuver is one where an aircraft makes an approach to the runway, at a higher altitude than if it were going to land, and makes a descending turn to landing.

The B-52 flew directly over a part of the crowd in a high banked turn. (Tab AA-25.1) The large banked turns seen in a video of the exhibition were not in accordance with guidance listed in the Pilots' Flight Manual, T.O. 1B-52G-1-11 (Dash 11). The Dash 11 specifies the maximum bank angle permitted during a circling or visual approach in the pattern to be 30 degrees. (Tab AA-2.2, AA-2.3, and AA-9.2)

The commander of 92nd Bomb Wing during the 1991 air show was Col Arnold L. Weinman. The 92nd Bomb Wing Deputy Commander for Operations was Col Arnold L. Julich. (Tab AA-24.1) There is no evidence that Col Weinman or Col Julich were aware that the profile may have ignored MAJCOM regulations or the Dash 11.

(2) **12 July 1991.** Lt Col Holland piloted a fly over for a 325th Bomb Squadron change of command ceremony. (Tab V-3.5 and V-7.6) During the event, Lt Col Holland passed over the change of command ceremony formation at a height estimated at less than 500 feet Above Ground Level (AGL). (Tab V-5.6, V-27.7, and V-37.8) Col David Capotosti, 92nd Bomb Wing Assistant Deputy Commander for Operations, attended the ceremony and estimated this pass to be as low as 100-200 feet AGL. (Tab V-3.5)

Lt Col Holland also made several practice passes earlier in the day, prior to the change of command ceremony. (Tab V-37.8) These practice passes appear to have been at altitudes less than 500 feet. One of the passes included a steep banked turn (over 45 degrees of bank). On another pass, there was a high pitch angle climb followed by a wingover. (Tab AA-25.2) A wingover is a maneuver in which the pilot rolls the aircraft on its side while in a climb and allows the nose of the aircraft to fall below the horizon to increase airspeed.

The Dash 11 specifies that aircraft bank angles in the traffic pattern for circling or visual approaches will be limited to a maximum of 30 degrees of bank. (Tab AA-2.2 and AA-2.3) The Dash 11 also recommends against wingover type maneuvers as the side slip may cause structural damage to the aircraft. (Tab AA-2.7) Additionally, scheduling a fly over at a change of command ceremony required Vice Chief of Staff of the Air Force approval. (Tab AA-4.12A) The passes over the parade formation required a Federal Aviation Administration (FAA) waiver to accomplish a fly over at less than 500 feet. (Tab AA-3.3) The board could not determine if a

waiver was requested or granted. The FAA representative with jurisdiction over Fairchild AFB does not recall granting a waiver for such a maneuver, but cannot be sure due to the time elapsed since the event took place. (Tab AA-3.6)

The 92nd Bomb Wing Commander during July 1991 was Col Arnold L. Weinman. The 92nd Bomb Wing Deputy Commander for Operations was Col Arnold L. Julich. The new 325th Bomb Squadron Commander was Lt Col George G. Schmidt. (Tab AA-24.1) Testimony indicated that Col Weinman did not approve of the low altitude passes flown and verbally reprimanded Lt Col Holland for the action. (Tab V-1.3, V-3.7, and V-5.6) Col Julich was in attendance at the change of command. There was no evidence found by the board to document any further actions, such as an annotation in his permanent training or qualification folder.

Col Capotosti, after the 12 July 1991 change of command, compiled a quick-reference file on fly-overs and air shows. He gave the file to his deputy, Lt Col Harper. (Tab V-3.14) The board is unaware if the file contained other information on personnel.

(3) 17 May 1992. Lt Col Holland flew the B-52 exhibition at the 1992 Fairchild AFB, Wa, air show. (Tab V-3.10 and V-11.3) The flight profile included low altitude steep turns (greater than 45 degrees of bank) and a high speed pass down the runway. (Tab AA-25.3) At approximately the midfield point of his high speed pass, Lt Col Holland completed a high pitch angle climb, estimated at 60 degrees nose high. At the top of the high pitch climb, Lt Col Holland then executed a wingover. (Tab AA-25.3)

The Dash 11 restricts bank angles during visual and circling approaches to 30 degrees. (Tab AA-2.2 and AA-2.3) The Dash 11 also cautions against sideslip maneuvers (including wingovers) because structural failure or damage may occur. (Tab AA-2.7) This profile would have required Strategic Air Command (SAC) headquarters approval. (Tab AA-9.2) This board was unable to determine if such approval had been given due to the time elapsed from the event and the inactivation of SAC.

The 92nd Bomb Wing Commander during the May 1992 air show was Col Michael G. Ruotsala and the Deputy Commander for Operations was Col Arnold L. Julich. Col Julich was overseas on temporary duty during the January through April 1992 time frame and then moved to a new position during May 1992. (Tab V-7.3 and V-7.4) The Assistant Deputy Commander for Operations, Col David Capotosti did not take part in any of the air show planning due to a family emergency. (Tab V-3.9) However, he did see the 17 May 1992 air show and was concerned with Lt Col Holland's B-52 exhibition profile. (Tab V-3.9) Col Ruotsala remembers seeing a portion of the 1992 air show. Col Ruotsala does not remember any specific discussion in staff meetings about whether or not the maneuvers were in accordance with the regulations. (Tab V-6.6) He believed the B-52 exhibition to be in compliance with MAJCOM policies. (Tab V-6.6)

Approximately seven days after the air show, Col David Capotosti, became the 92nd Operations Group Commander and subsequently called Lt Col Holland into his office. (Tab V-3.10) At this meeting, Col Capotosti told Lt Col Holland that he was never going to fly another

air show as long as he (Col Capotosti) was the operations group commander. Col Capotosti also said that if he ever found out that Lt Col Holland violated flying regulations that he would permanently ground Lt Col Holland. Col Capotosti did not communicate this decision to the 92nd Bomb Wing commander. (Tab V-3.11) There is no evidence found by the board showing documentation of Lt Col Holland's actions in his permanent training or qualification folder.

(4) **14-15 April 1993.** Lt Col Holland was the mission commander of a two ship Global Power mission to the bombing range located in the Medina De Farallons, a small island chain off the coast of Guam, in the Pacific Ocean. During the mission, Lt Col Holland flew a close, visual formation with another B-52 to take pictures. (Tab V-26.18) This type of formation was prohibited by ACC for B-52s. (Tab V-17.1, AA-10.1, and AA-10.2) Later in the same mission, Lt Col Holland permitted a crew member to leave the main crew compartment and work his way back to the bomb bay access door to take a video of the bomb bay while live munitions were being released on a target. (Tab V-5.7, V-26.20, and V-26.21)

The 92nd Bomb Wing commander in April 1993 was Brig Gen James S. Richards. (Tab AA-24.1) Gen Richards was never informed of the actions that occurred on the flight. (Tab V-1.4 and V-1.5) Col Capotosti, the 92nd Operations Group Commander, does not recall being made aware of the events on the flight. (Tab V-3.12) Col Stephen D. Harper, 92nd Deputy Operations Group Commander during this period, became aware of the flight's events sometime afterwards and believes he discussed them with Col Capotosti. (Tab V-5.8) The 325 Bomb Squadron Commander, Lt Col David E. Bullock remembers there being some discussion of improper flight activity; however, no one told him specifically that they had seen the events happen, or knew who did it. (Tab V-11.7) The board could not determine if any actions were taken. There is no evidence found by the board to document Lt Col Holland's actions in his permanent training or qualification folder.

In May 1993, Col Capotosti was reassigned and left the base and the new 92nd Operations Group Commander, Col William E. Pellerin, arrived on station in June 1993. (Tab AA-24.1) Col Capotosti and Col Pellerin were never able to meet to discuss personnel in the group. (Tab V-3.14 and V-8.27) Lt Col Harper, the deputy group commander, remained in his position to provide continuity. (Tab AA-24.1)

(5) **8 August 1993.** Lt Col Holland flew the B-52 exhibition for the 1993 Fairchild AFB air show. (Tab V-1.7, V-8.5, V-8.6, V-14.7, V-25.9, V-26.10, and V-37.11) Lt Col David E. Bullock, the 325th Bomb Squadron Commander, was scheduled to fly as Lt Col Holland's copilot on this mission. (Tab V-1.7, V-11.9, and V-37.10) However, approximately twelve hours before the flight he went on emergency leave and was replaced by Major Jay Slaughenhaupt. (Tab V-1.7 and V-37.10)

One crew member on the flight indicated that this exhibition was flown with extreme aggressiveness (Tab V-26.10). The flight profile included turns with very large bank angles, estimated at over 45° and at low altitudes less than 500 feet AGL. (Tab V-26.10 to V-26.14) Such turns would be contrary to Dash 11 guidance restricting bank angles during visual or circling

approaches in the traffic pattern to no more than 30° of bank. (Tab AA-2.2 and AA-2.3) ACCR 51-50 Vol 22 prohibits steep turns at altitudes of less than 1000 feet AGL. (Tab AA-6.4)

The exhibition also included a high speed pass down the runway and, at approximately midfield, a pitch up into a high pitch angle climb. The airspeed at the beginning of the climb was 390 KIAS. (Tab V-37.15) The aircraft pitch for the climb was estimated to be up to 80 degrees nose high by the radar navigator. (Tab V-26.11) A second crew member, the copilot thought the pitch may have been 60 degrees, but was not sure. (Tab V-37.15)

ACC approval was required for the exhibition, but had not been asked for or granted. (Tab V-17.5, V-17.7, and AA-4.7) The 92nd Bomb Wing Commander, Gen Richards, stated he looked to Col Pellerin, the 92nd Operations Group Commander, to ensure the B-52 exhibition was in compliance with appropriate ACC and FAA regulations, and believes he asked that very question. (Tab V-1.7) He was never informed that the B-52 exhibition might be contrary to ACC policy and Dash 11 guidance. (Tab V-1.6) Gen Richards recalls part of the B-52 exhibition, but was not able to focus on the B-52's maneuvers due to the demands on his time by the Thunderbirds. (Tab V-1-8) Col Pellerin counted on Lt Col Holland to coordinate with the appropriate authorities and had no reason to believe that it had not been accomplished. (Tab V-8.30 and V-8.31)

(6) **10 March 1994.** Lt Col Holland flew a single ship mission to the Yakima Bombing Range to drop practice munitions and provide an authorized photographic opportunity for a free-lance author writing a book. (Tab V-28.4 and V-28.5) Lt Col Holland flew the aircraft closer to the ground than the 500 foot AGL minimum (ground) clearance plane specified by ACC regulations. (Tab V-28.6, V-29.5, and AA-18.3) The aircraft consistently crossed ridge lines at less than the minimum altitude, with the lowest crossover being less than 30 feet. (Tab V-28.8, V-29.5, and AA-25.4) A member of the crew, stated that if he had not intervened and demanded the aircraft climb, and then assisted on the aircraft's controls, they would have struck the ridge. (Tab V-28.8) During these low crossovers, the aircraft flew directly over people on the ground, contrary to restrictions in Federal Aviation Regulations (FAR) Part 91 and Air Force Regulation (AFR) 60-16. (Tab V-28.10, AA-3.3, and AA-5.9) Also, while on the range, Lt Col Holland, allowed his aircraft to join a formation of A-10's to accomplish a flyby over the author/photographer. (Tab V-28.9 and AA-25.4) This formation flight was not part of the planned mission profile and was in contradiction to ACC policy and directives. (Tab V-17.1, V-28.9, AA-10.1, and AA-10.2)

The 325th Bomb Squadron commander, Lt Col McGeehan, after hearing of the events on the range, to include the low crossovers and the flight over personnel on the ground, decided to ask Col Pellerin to restrict Lt Col Holland from further flying. (Tab V-2.26, V-8.26, and V-28.14)

(7) In April 1994, after a series of discussions between Lt Col McGeehan, 325th Bomb Squadron Commander, and Col Pellerin a meeting was scheduled to discuss the issue. (Tab V-8.23 and V-8.24) The issue was whether or not Lt Col Holland should be removed from flying status because of his airmanship on the Yakima Bombing Range and the example it set for younger flyers. (Tab V-8.25, V-8.26, V-21.8, V-28.17, and V-33.2) There was a second meeting which Lt Col Holland attended. (Tab V-8.26, V-21.8, V-28.17, and V-33.2) Col Pellerin denied Lt Col McGeehan's request and stated that Lt Col Holland would continue to fly and with whomever he wanted. (Tab V-8.26, V-21.9, and V-28.17)

Col Pellerin was not aware of the events on the range until Lt Col McGeehan brought them to his attention. Col Pellerin discussed the events with Lt Col Holland and was told that he (Lt Col Holland) was just trying to demonstrate the capabilities of the aircraft to fly below clearance planes in some particular circumstances. (Tab V-8.24) Col Pellerin considered Lt Col Holland's actions to be a breach of air discipline. (Tab V-8.24) He verbally reprimanded Lt Col Holland for his actions on the bombing range. (Tab V-8.26) Lt Col Holland assured Col Pellerin that he would not violate any air regulations. Col Pellerin stated he was not aware that another member of the crew had to intervene and take control of the aircraft to avoid hitting the ridge. (Tab V-8.25) Col Pellerin never saw the video of the flight and was not aware of the impromptu formation with the A-10s. (Tab V-8.24 and V-8.25)

Lt Col McGeehan did not pursue the issue with wing leadership. (Tab V-2.25) The board heard testimony that Lt Col McGeehan then decided to fly with Lt Col Holland any time he flew, rather than expose younger members of the crew force to his poor airmanship. (Tab V-33.3 and V-40.11) The board found no evidence that any annotations were made in Lt Col Holland's permanent training or qualification folders. Col Pellerin did not inform the wing commander, Col Brooks, of Lt Col Holland's actions at the Yakima Bombing Range. (Tab V-2.25 and V-8.26)

(8) During the April-May 1994 time frame, Lt Col (Dr) Robert Grant, 92nd Air Refueling Squadron Flight Surgeon, became concerned when he heard that Lt Col Holland would fly in the 1994 air show. He discussed his concerns about the maneuvers and Lt Col Holland's aggressive flying with a crew member who was at the clinic for a routine appointment. (Tab V-14.6) The crew member told Dr Grant that he would not fly with Lt Col Holland because of his overly aggressive flying. (Tab V-14.6)

Sometime later, Dr Grant discussed his concerns with the 92nd Bomb Wing, Chief of Wing Safety, Lt Col Michael E. McCullough, during an impromptu meeting at the flight surgeon's clinic. (Tab V-14.7) Lt Col McCullough told Dr Grant that Lt Col Holland was a good pilot and the maneuvers had been done before. The board found no evidence that Dr Grant pursued the matter further. Lt Col McCullough stated he did not recall this conversation with Dr Grant. (Tab V-18.2) Later, Dr Grant discussed his concerns with Lt Col (Dr) Issak, Chief of Aeromedical Services, 92nd Medical Group. (Tab V-14.11) Dr Issak did not pursue the issue after he learned Dr Grant had already discussed it with the wing safety officer. (Tab V-41)

(9) 17 June 1994. Lt Col Holland and the accident crew flew their first practice mission for the 1994 air show. (Tab V-8.12) This flight profile was nearly identical to the accident profile flown on 24 June 1994, except that, two complete profiles were practiced. (Tab V-8.13) Both profiles included large bank angles and a high pitch angle climb to altitude. Bank angles were not as aggressive as the 24 June 1994 flight, but were still contrary to ACC and Dash 11 guidance. (Tab V-8.13, AA-2.2, AA-2.3, and AA-8.3) Both profiles, at times, were contrary to Col Brooks' guidance given at an air show planning meeting held by Col Brooks on 15 June 1994 described in paragraph 2(f) below. Col Brooks directed a maximum bank angle of 45 degrees and pitch angle of 25 degrees. (Tab V-8.13 to V-8.16) Col Pellerin, the 92nd Operations Group Commander, flew on this mission occupying the instructor pilot position during the exhibition. (Tab V-8.12 and AA-16.1) At the conclusion of the mission, Col Pellerin told the wing commander that "the profile looked good to him; looks very safe, well within parameters." (Tab V-2.23 and V-8.12)

One witness reported Col Brooks was able to view a portion of the profile and was concerned with the maneuver he witnessed. (Tab V-9.3) However, Col Brooks could only recall seeing a brief moment of the show. (Tab V-2.22) Col Brooks was concerned that one of Lt Col Holland's turns might break the air show's "show line". (Tab V-2.33, V-4.12, and V-4.13) An air show "show line" is the closest distance the spectators are allowed to get to the runway.

This practice mission required an FAA waiver. (Tab AA-3.2, AA-3.3, and AA-3.3A) The FAA representative reported no waiver had been asked for or granted. (Tab AA-3.5) Maneuvers performed during this mission also required ACC waivers that were not obtained. (Tab V-12.3) The bank angles used in the low altitude turns in the traffic pattern did not follow the guidance in the Dash 11. (Tab V-8.13, AA-2.2, and AA-2.3) Additionally, the Dash 11 prohibits acrobatic flight. (Tab AA-2.15)

(f) Air show planning. Early in the wing's air show preparation phase, Lt Col Holland was assigned the B-52 exhibition flight for the 1994 air show. (Tab V-8.5) The exact date of this decision could not be determined. (Tab V-8.6) Lt Col Holland had flown several B-52 air show exhibitions in recent years. (Tab V-8.6) The board could find no evidence that other pilots were considered for this mission or that there were any objections within the senior leadership to Lt Col Holland flying the B-52 exhibition. (Tab V-2.9 and V-8.6)

The 92nd Bomb Wing Commander, Colonel (Brig Gen select) William C. Brooks held a meeting on 15 June 1994 to review all air show plans. (Tab V-4.11 and V-8.7) Attending were Col Wolff, Col Pellerin, Col Richard E. Fitzhugh, Jr., the 453d Operations Group commander, along with other commanders and the air show staff. (Tab V-4.11 and V-8.8) The 453d Operations Group was a tenant unit at Fairchild and was to provide the KC-135R tanker aircraft exhibition for the Fairchild air show, with the call sign "Earl 01". Lt Col Holland and the Earl 01 crew commander attended the 15 June 1994 meeting. (Tab V-4.11 and V-8.8)

Lt Col Holland briefed his proposed maneuvers to Col Brooks and the staff at this meeting. Lt Col Holland's briefing was not a detailed briefing and only covered the points on his briefing

slides. (Tab V-8.7 and AA-13.1 to AA-13.10) His proposed profile included bank angles of at least 60 degrees, a high pitch angle climb of 50-60 degrees nose high, and KC-135/B-52 formation. (Tab V-2.15, V-8.10, AA-13.9, and AA-13.11) He also briefly reviewed 1993's air show maneuvers. (Tab V-8.10) Lt Col Holland briefed that the first maneuver would be a climbing turn to gain altitude. (Tab V-2.11) Col Brooks understood this maneuver to be a climb to a standard closed traffic pattern to gain altitude. (Tab V-2.11) A standard closed traffic pattern for a B-52 consists of two climbing 90 degree turns to pattern altitude. A downwind leg, parallel to the runway, is flown followed by two descending 90 degree turns to a final approach for landing. Lt Col Holland actually flew a climbing 360 degree turn around the tower. (Tab V-40.6 to V-40.7) The purpose of this climb was to always have minimum "deadhead" or inactivity time for the air show spectators. (Tab V-8.9)

The AA and Earl 01 were to demonstrate their aircraft to the air show crowd in the same time frame, but not in close formation. The exhibition profile called for each aircraft to make multiple, independent passes along the runway. As one aircraft passed the runway environment the other would be approaching. (Tab V-8.7)

Lt Col Holland had initially planned for a wing approach and pitchout to land. (Tab AA-13.9 and AA-13.11) A wing approach would place the two aircraft almost abeam each other in a visual formation. As the two aircraft approached approximately midfield over the runway, each would separately execute a turning descent to a landing. The formation was rejected by the 92nd Operations Group and 453d Operations Group Commanders and the commander of Earl 01 prior to the 15 June 94 meeting. (Tab V-4.13 and V-23.7 to V-23.9)

At the 15 June 1994 meeting, Col Brooks' instructions to Lt Col Holland were that there would be no formation flying. (Tab V-2.10, V-4.13, and V-8.7) The maximum maneuvers would be 45 degrees of bank and 25 degrees of pitch. (Tab V-2.15) He also stated that no one was to violate any of the rules and emphasized that safety was paramount. (Tab V-2.15, V-2.28, and V-34.3) After the meeting, Col Brooks was still concerned about the proposed profile, so Col Pellerin said that he would talk to Lt Col Holland. The next morning, Col Pellerin reiterated to Lt Col Holland that there would be no pitch angles in excess of 50 degrees. (Tab V-8.10 and V-8.11)

The 92nd Bomb Wing had not requested or obtained approval from Air Combat Command in accordance with (IAW) Air Force Instruction (AFI) 11-209, Air Force Participation in Aerial Events, dated 17 February 1994, for the AA's flight or any of the specific maneuvers as of the date of the accident. (Tab V-2.17 and V-8.19) AFI 11-209, the new manual, and AFR 60-18, the superseded manual, delegated to the Major Commands (MAJCOMS) the authority to grant approval for aircraft demonstrations such as the one flown by the AA. (Tab AA-4.2) ACC Regulation (ACCR) 55-18 states that the wing commander or equivalent can approve fly-overs for an on base event. A fly over is defined as a straight and level flight, by no more than four aircraft, over a fixed point, and not involving aerobatics or aircraft exhibition. (Tab AA-4.4) Additionally, the FAA is the only authority to grant waivers for a exhibition such as the one flown by the AA. (Tab AA-3.2, AA-3.3A, and AA-5.7)

(g) Authorized Flight Parameters.

(1) 24 June 1994. The aircraft and crew were restricted to normal flying regulations. Maximum airspeed was restricted to no more than 250 Knots Indicated Air Speed (KIAS) below 10,000 feet Mean Sea Level (MSL). (Tab AA-3.2 and AA-5.8) No aerobatic flight maneuvers were allowed. An aerobatic (for the purposes of this report the term aerobatic is equivalent to acrobatic) maneuver is defined as an intentional maneuver involving an abrupt change in an aircraft's attitude, an abnormal attitude, or acceleration, not necessary for normal flight. (Tab AA-3.3A) The board could find no evidence that Lt Col Holland researched the regulations pertaining to the flight.

(2) The B-52 Pilots' Flight Manual, T. O. 1B-52G-11-1 restricts the bank angles used for maneuvering in the traffic pattern to 30 degrees of bank for both circling and visual patterns. (Tab AA-2.2 and AA-2.3) The limit for steep turns at or above 1,000 feet AGL is 45 degrees of bank as outlined in ACCR 55-152. (Tab AA-8.3) The board could find no evidence that Lt Col Holland researched the authorized flight parameters. Additionally, acrobatic flight is prohibited. (Tab AA-2.15)

(h) Mission planning. Lt Col Holland planned this mission as a cell departure. (Tab K-1) This is a large aircraft formation takeoff with the spacing between aircraft of one minute or more. The crew of Earl 01, planned their mission as a single aircraft. (Tab V-23.15) If a cell formation was intended, Lt Col Holland was required to conduct a formation briefing prior to the flight with all crew members from each aircraft in attendance. (Tab AA-8.2) The Earl 01 aircraft commander discussed the mission several times either over the phone or in meetings with Lt Col Holland. (Tab V-23.12) Crew members of Earl 01 testified that at no time did the entire two crews get together to discuss the mission. (Tab V-23.13)

b. **Mission.** The mission was planned for a one hour sortie. Its flight objectives were air show practice and routine traffic pattern training. (Tab K-1, N-23 to N-26, and AA-14.1)

c. **Briefing and Preflight.** The aircraft commander of this mission was authorized to certify his own aircrew briefing IAW ACCR 55-152. (Tab AA-8.2) The briefing authorization letter could not be found because of unit inactivation. No other personnel needed to attend the briefing except for the crew members flying. (Tab AA-8.2) The mission briefing length, detail, and adequacy of their mission planning could not be determined. Col Wolff did not attend mission planning. He was added to the mission the morning of the flight. (Tab V-2.30) The board found no evidence that Col Wolff attended the formal crew briefing prior to takeoff as required by ACCR 55-152. (Tab AA-8.2)

All mission planning paperwork was lost in the accident except the DD Form 175, Flight Plan; DD Form 365-4, Weight and Balance Clearance Form F; and ACC Form 50, Flight Orders, which were on file at base operations.

The accident crew filed a Visual Flight Rules (VFR) flight plan as the lead aircraft of a two aircraft cell formation with Earl 01. (Tab K-1) The Earl 01 aircraft commander did not consider himself to be in formation with the AA and he intentionally filed an independent flight plan. (Tab V-23.15) Because the AA aircraft commander's intent was to fly as a formation, he was required to conduct a cell formation briefing by ACCR 55-152. (Tab AA-8.2) He did not conduct the required briefing, but the AA aircraft commander did meet with the crew of Earl 01 at base operations to review the air show exhibition profiles and answer any questions. (Tab V-23.12) The remaining crew members of the AA were not present. (Tab V-23.13)

The crew did not fly the day prior and was scheduled for the proper amount of crew rest. (Tab G-5, G-6, G-10, G-11, G-15, G-16, G-20, G-21, and AA-5.4) The crew arrived at base operations at approximately 0700 PDT on Friday, 24 June 1994. (Tab V-22.2) The crew, with the exception of Col Wolff, received a weather briefing and filed their flight plan. (Tab K-1, V-40.3, and W-1) Col Wolff did not join the crew for the mission until just prior to aircraft taxiing. (Tab V-40.3) He did not receive a weather briefing as required by ACCR 55-152. (Tab V-40.3 and AA-8.2) The Supervisor of Flying, Capt Jesse E. Ward, IV, met with Lt Col Holland and the crew at base operations and told him that he had checked on their aircraft and it was in commission. (Tab V-40.2 and V-40.3)

Lt Col Holland called the watch supervisor in the airfield tower to brief the flight profile for the flight's planned air show maneuvers. (Tab N-23 to N-27 and V-30.3) The watch supervisor was the person in charge of operations in the air traffic control tower. The watch supervisor called Spokane Approach Control to coordinate Czar 52's exhibition profile. (Tab N-27 - N-32) Spokane Approach did not believe there would be a problem with the Czar 52's request. (Tab N-31) Scheduled takeoff time was at 1000 hours PDT. (Tab V-30.3 and AA-14.1) The mission was delayed approximately four hours due to distinguished visitors being on-station. (Tab V-8.17)

The crew arrived at the aircraft at approximately 0800 hours PDT for preflight. (Tab V-40.3) The crew was informed at some point during the preflight that their mission was delayed. They returned in the afternoon and completed their preflight. (Tab V-40.3) Maintenance personnel testified that the AA's preflight inspection surfaced no maintenance problems. (Tab V-31.4) A review of the crew's preflight procedures revealed that the pilot did not sign the Air Force Technical Order (AFTO) Form 6, B-52 Aircraft Refueling and Distribution Log, as required by T.O. 1B-52H-1-1. (Tab AA-1.2 and AA-19.1) He also did not sign the AFTO Form 46, Prepositioned Life Support Equipment, signifying that he had checked the aircraft's life support equipment for the required items and currency. (Tab AA-20.1 and AA-20.2) His signature on this form is required prior to takeoff. (Tab AA-7.4) Also, the pilot did not ensure the aircraft forms and weight and balance information were on the aircraft before taxi. The aircraft forms remained with maintenance personnel on the ground. The crew received their VFR clearance prior to engine start. Engine start was at 1318 hours PDT with taxi at approximately 1345 hours PDT. (Tab N-4 to N-9) Earl 01 and the AA taxied to runway 23 for departure. (Tab N-6 and N-9)

d. **Flight.** The AA took off at 1358 hours PDT and was followed approximately two minutes later by the takeoff of Earl 01. (Tab N-14, N-15 and AA-25) Lt Col Holland planned to be the

exhibition pilot for the air show. (Tab V-8.5) Medical evidence shows that Lt Col Holland was flying the aircraft at the time of the accident. (Tab X-1 and X-2) The board found no evidence that Lt Col McGeehan was performing the maneuvers. (Tab X-1 and X-4)

The takeoff power setting intended to be used was Takeoff Rated Thrust (TRT). (Tab V-40.9) This is the maximum thrust setting recommended by the aircraft manufacturer. (Tab AA-1.3) The use of TRT in this situation ignores performance manual recommendations on partial thrust takeoff power settings. (Tab AA-1.4) The AA lifted-off prior to midfield and began a climbing 360 degree turn around the tower with the flaps down. A bank angle of 50 degrees was planned, with 45 to 60 degrees being used. (Tab V-2.15 and V-40.10) Completing his 360 degree turn, the AA then turned approximately 30 degrees right of runway 23 heading, continued to climb, and retracted the flaps. The AA then turned left and descended for a low altitude, (estimated at less than 500 feet AGL), medium speed (estimated 250-270 KIAS) pass down runway 05. Upon completion of the medium speed pass, the AA turned left approximately 30 degrees, using 45 degrees of bank, off the runway 05 heading to set up for a high speed approach to runway 23.

The AA accelerated for his runway 23 pass and at approximately midfield, the aircraft started a pull up to demonstrate a high pitch angle climb with a low-G pushover at approximately 10,500 feet MSL. (Tab AA-21.1) This 8,000 foot climb took 24 seconds. (Tab AA-21.1) Sometime prior to the flight on 24 June 1994, Capt Ward discussed the planned maneuvers with Lt Col Holland. (Tab V-40.9) The planned airspeed for the start of this maneuver was 370 KIAS with a smooth 2 G pull to a pitch angle of 60 degrees nose high. (Tab V-37.15, V-40.9, and V-40.10) This airspeed required a waiver to the FARs, which was not asked for by the wing for the practice mission. (Tab AA-3.2 and AA-3.5) The pilot planned to push the aircraft nose over at 220 KIAS, so it was below the horizon and then let the aircraft accelerate. (Tab V-40.10) The AA then offset right and started a descending left teardrop to runway 05 for a pass at pattern altitude (estimated 1200 feet AGL). At the end of runway 05, the AA started a left turn, extending the flaps, to roll out on a downwind leg to runway 05. (Tab A-1)

On downwind, the AA extended the landing gear and turned approximately 90 degrees to roll out on a left base leg. The AA then completed a left turn to final and began a landing attitude demonstration. A landing attitude demonstration consists of a gear and flaps down configuration, extremely low altitude (approximately 50-100 feet AGL) pass down the runway. This demonstration is used to show new B-52 pilots an example of the attitude the aircraft should have for landing. The airspeed for this maneuver is usually slower than final approach speed and higher than landing speed. At midfield, the AA initiated gear retraction and began a steeply banked (60 degree) left climbing turn. Planned bank angle was 50 degrees. (Tab V-40.10) The Dash 11 states that aggressive turns at low altitude may result in very low clearance of the down wing and allow very little room for error. In a 40 degree banked turn, the down wing tip is approximately 55 feet below the aircraft fuselage. (Tab AA-2.13) After 90 degrees of turn, the AA rolled out and then turned right 90 degrees to a modified runway 23 downwind. The AA turned right to a base leg and right again to final approach to runway 23 for a low approach. The AA then accomplished a low speed (estimated at 150 KIAS) pass down runway 23 at an altitude

less than 200 feet AGL. At the end of the runway the AA added a large amount of power and made a steeply banked (approximately 80 degrees), climbing right turn. Part way around this turn the aircraft began a tail-first slide and lost approximately 100 feet in altitude. This tail-first slide may be evidence of the aircraft entering into a partially stalled condition.

The following is a brief summary, compiled by the board, of Dash 11 discussion and basic aerodynamic information pertaining to aircraft stalls and the effect of winds on aircraft.

AIRCRAFT STALLS

A stalled condition is one in which an aircraft is flying just below the minimum airspeed that will produce enough lift to keep it flying. This speed will vary depending on gross weight, aircraft configuration, bank angles, the amount of Gs being pulled, and other reasons. A stall at a G loading of greater than one G is called an accelerated stall. (Tab AA-2.13B) Stall speeds increase with bank angles and this increase becomes significantly more rapid at bank angles over 30 degrees. This emphasizes the need to avoid steep bank angles at low airspeeds. (Tab AA-2.10) During an accelerated stall the buffeting is more severe and the time from stall warning is less. (Tab AA-2.13B)

WIND EFFECT

The wind could also have an effect on the aircraft. The winds were 207 degrees at 11 knots a few minutes after this turn. The runway heading is 229 degrees. This would make the headwind component 10 knots. As the aircraft turned to the right the headwind component would change to a crosswind and finally into a tailwind. As the headwind decreases, the aircraft senses a loss in airspeed which would decrease lift and could bring the airspeed below the stall speed. The aircraft, in this turn, has in essence experienced a very slowly developing wind shear. (Tab AA-2.14)

Following the tail slide the AA rolled out approaching downwind and continued the climb to pattern altitude to set up for an approach to runway 23. The AA turned right 90 degrees to a base leg and continued his turn to final approach to runway 23. (Tab A-1) This approach signified the end of the planned exhibition profile.

After rolling out inbound to runway 23, the AA began a go-around because Earl 01 was on the runway completing a touch-and-go. (Tab V-25.4 and V-30.12) The AA started his go-around and made a slight turn to position himself left and parallel to the runway, but on a heading that took the AA between the tower and the runway. (Tab V-30.15) The crew raised the gear and requested a 360 degree turn around the tower for spacing from the tower controllers. (Tab V-30.12) The tower controller acknowledged the request, but did not specifically clear the crew to perform the maneuver. (Tab V-30.13) Tower controllers were uncertain about whether or not the air show practice session was over; they did not question the maneuver. (Tab V-30.13)

Testimony and other data indicates the AA pilot maintained approximately 250 ft AGL (Tab V-27.3 and AA-21.1) and 170-180 KIAS pattern airspeed (Tab V-30.17, V-40.10, AA-1.5, and AA-2.8) as he passed in front of the tower. The AA then began another level turn and applied a small amount of additional thrust. (Tab V-27.3)

The AA rolled into his left turn with a pitch angle that was slightly above the horizon. (Tab V-25.5 and V-27.3) The bank angle was 64 degrees and increased to 72 degrees after accomplishing 60 to 90 degrees of turn. (Tab AA-22.2) The aircraft began a tail-first slide and lost an estimated 50 to 100 feet in altitude. At this point, the aircraft again entered into a partially stalled condition. The high bank angles and the changing of the headwind component into a crosswind had the same effect as in the previous partially stalled condition described above. As the aircraft began to pass behind the tower, it rolled out slightly to an estimated 45 degrees of bank, which broke the stall, arrested the descent, and enabled the aircraft to start a slight climb. (Tab V-27.4 and AA-22.2) No additional power input was detected. Because no power was added throughout the first part of the turn, the aircraft had decelerated and was flying slower than the 170-180 KIAS at the start of the turn. Photography of the aircraft passing behind the air traffic control tower shows airbrake position two had been selected. (Tab S-1) This is consistent with tear down analysis performed on the flight controls. (Tab J-10) Selection of air brake position two, in the pattern, eases the pilot work load by significantly increasing the aircraft roll response. (Tab AA-2.6) The use of air brakes has a negligible effect on the stalling speed. (Tab AA-2.9) The AA rounded the tower and began to turn toward the runway.

As the aircraft completed its pass behind the tower, the AA steepened its bank to approximately 90 degrees of bank and the nose began to fall. (Tab V-25.5, V-27.4, and AA-22.2) The aircraft had entered into a stalled condition once more. Several events occurred that influenced the aircraft. First, the wind had now shifted to a tailwind of approximately 10 knots. The wings sensed a loss of 10 knots of airspeed since the turn was started. Second, the airspeed had decreased since the beginning of the turn because no power has been added. Since the aircraft was traveling slower it was closer to the stalling speed.

The following chart is derived from the aircraft performance manual and shows the relationship of bank angles and airspeeds. The speeds are based on the gross weight and configuration of the aircraft at the time of impact. (Tab J-7 and AA-1.5 to AA-1.7)

AIRSPEED	AIRCRAFT BANK ANGLE			
	0 degrees	30 degrees	45 degrees	60 degrees
Normal Go-Around*	163 KIAS	163 KIAS	N/A	N/A
Minimum Recommended	120 KIAS	129 KIAS	141 KIAS	168 KIAS
Initial Buffet**	115 KIAS	121 KIAS	134 KIAS	159 KIAS
Strong Buffet***	110 KIAS	117 KIAS	123 KIAS	145 KIAS

*Normal go-around speed is based on the aircraft gross weight. It is 30 KIAS above the speed used to start the landing flare. It is not applicable to bank angles above 30 degrees, since that is the maximum bank angle allowed in an approach-to-landing pattern.

** Initial Buffet speed is the speed when the aircraft enters into a mild buffet, warning the pilot of an approaching stall.

*** Strong Buffet speed is the speed when the aircraft is fully stalled.

As the chart shows, at 60 degrees of bank, the initial buffet speed is just below the planned (0 to 30 degree) normal go-around speed of 163 KIAS. The chart in the performance manual does not depict bank angles greater than 60 degrees.

As the aircraft continued its final turn, there was a second, deeper stall, as evidenced by the nose falling through the horizon. [In a turning stall, the lower wing will stall first because it is sensing a lower airspeed than the upper wing. This will make the bank angle increase because there is greater lift on the upper wing. The aircraft will also tend to resist control inputs trying to bring the wings back to a level attitude.]

The falling of the nose was followed by a decrease in engine exhaust smoke and noise. (Tab AA-25.5)

The AA pilot made a control input to bring the right wing down and return to level flight. [Within normal flight regimes the B-52 can take up to three seconds to respond to a lateral control input. (Tab AA-2.11) Lateral control authority decreases significantly in a stalled condition because the spoilers will not be disrupting the airflow as effectively as they would in a non-stalled condition. (Tab AA-2.12) This effectively lengthens the time it takes the aircraft to respond to the control input.]

The nose of the aircraft continued to drop as the bank angle increased. The copilot attempted ejection, but the plane was too close to the ground and in too steep a bank. (Tab A-1 and X-4) The aircraft impacted the ground. With the aircraft attitude (90 degrees of bank and 15 degrees of dive), the pilots required 400 feet AGL and the radar navigator needed 520 feet AGL for a successful ejection. (Tab AA-2.4 and AA-2.5) Approximately twenty seconds had passed since the AA flew in front of the tower and initiated the final 360 degree turn. (Tab AA-25.5)

e. **Impact**. The aircraft impacted the ground at approximately 1416 hours PDT in an open field on base at 47 36.29N and 117 39.2W. (Tab A-1) The aircraft impacted the ground at approximately 150 knots and 95 degrees of bank in a nose-low attitude. (Tab J-2 and J-3) The flight lasted approximately 18 minutes.

f. **Ejection/Bailout**

Investigation revealed no prior defects or discrepancies in the egress systems. All explosive items were current and properly installed. Three of the six ejection seats were occupied. The accident copilot attempted/initiated ejection, but was out of the ejection envelope. The ejection sequence was interrupted by ground impact. No other ejection attempts were made. The board found no evidence that manual bailout was attempted. The aircraft was below manual bailout parameters in its final turn.

g. **Personal and Survival Equipment**

(1) All personal and survival equipment inspections were current. Col Wolff was using a spare helmet for this flight. It was never fitted to him prior to the flight. (Tab V-47.1)

(2) No personal/survival equipment deficiencies were noted by the board.

h. **Rescue and Crash Response**

Airfield tower personnel immediately activated the crash net upon the AA striking the ground. (Tab V-30.20) Additionally, several fire department personnel were observing the flight and immediately responded. (Tab V-34.8) The first fire vehicles departed the main fire department station within 60 seconds of the crash. (Tab V-34.8) The base fire department also received help from the surrounding local communities with equipment and additional personnel. (Tab V-34.9) The Fairchild AFB hospital promptly responded to the accident site after notification by the primary crash net. Upon arrival in the crash area, witnesses notified fire and rescue personnel that at least one crew member had attempted ejection. Fire and rescue personnel began a search of the area. All crew members were found at the crash site and were fatalities. (Tab V-34.9) The rescue and crash response appeared to be well-organized and highly effective. (Tab V-10.5 to V-10.7) No deviations were noted.

i. **Maintenance Documentation**

(1) No maintenance discrepancies were noted within the 60 days prior to the accident which related to the accident. (Tab AA-17.1)

(2) All Time Compliance Technical Orders (TCTO) were up-to-date at the time of the accident. TCTO 1B-52-2525, Inspection Replacement Number 1 through 4 Main, Center Wing, and Outboard Tank Boost Pumps, is categorized as "interim routine", and is to be accomplished within 120 days of receipt or within 60 days prior to the recession date of 21 January 1995. The

TCTO requires maintenance to inspect and replace, as necessary, the Lear Romax fuel pumps. Work was to be done in conjunction with normally scheduled or unscheduled maintenance. This TCTO was partially done and did not contribute to the accident.

(3) All aircraft scheduled inspections were satisfactorily completed.

(4) Oil samples were analyzed every 30 hours of engine operation. An oil sample was due on the number 5 engine upon landing. All samples were historically taken on-time. No defects were noted, no oil samples were taken following the accident as no oil remained.

(5) All time change requirements were completed on-time.

(6) After review of the Equipment Review Report, the only action that was overdue within the last 60 days was the aircraft wash. The aircraft wash was accomplished on 22 June 94. This was not relevant to the accident.

(7) A review of all unscheduled maintenance performed since 26 April 1994 (60 days prior to the accident) indicated nothing relevant to the accident.

(8) No maintenance procedures, practices, or performance could be identified as related to the accident.

j. Maintenance Personnel and Supervision

(1) A preflight was performed on 23 June 1994 and was virtually reaccomplished on 24 June 1994. All personnel involved were professional, highly trained and experienced; many were senior Noncommissioned Officers. Aircraft 61-0026 was the only B-52 at Fairchild AFB at that time. Many personnel meticulously went over the aircraft prior to flight.

(2) Training records of all maintenance personnel involved with the preflight were reviewed. Their training and proficiency levels were compared to the Special Certification Roster and no deficiencies were noted.

(3) No maintenance practices or procedures contrary to technical data or sound logic were noted.

k. Engine, Fuel, Hydraulic, and Oil Inspection Analysis:

(1) All engine inspection, fuel test report, hydraulic fluid test report, and oil test report data were reviewed and found normal. (Tab O-10 to O-24)

(2) Review of Joint Oil Analysis Program, Engine Condition Monitoring Program and engine historical records revealed that no adverse wear metal trends or chronic engine operational problems existed on any of the engines prior to the mishap. (Tab J-12)

1. Airframe and Aircraft Systems:

(1) Review of engineering analysis of the engines showed all eight engines were operating between 60 and 80 percent RPM. Engine impact damage analysis and the fact that all overboard compressor bleed valves were captured in the open position confirm this conclusion. Additionally, all eight engines were capable of operating at full power. (Tab J-12)

(2) Review of engineering analysis of the flight controls revealed all flight controls were operating or capable of operating at the time of impact. (Tab J-10 and J-11)

(3) In a review of engineering analysis of the instruments, engineers found:

(a) One attitude director indicator was found and no readings obtained.

(b) The standby attitude indicator had the roll gimbal captured by impact in a position that correlated to approximately 95 degrees of left bank. Finding is reliable.

(c) Indicated airspeed indicators were found but readings from them are unreliable.

(d) A true airspeed indicator was found with the sub-dial captured at 150 knots at time of impact. This is a reliable reading.

(e) One altimeter was found from an undetermined position with no conclusive altitude obtainable.

(f) Radar altimeters provided no conclusive readings.

(g) Vertical velocity indicator parts were recovered, but none sufficient for analysis

(h) A standby compass was recovered and appeared functional.

(i) Seven of the eight engine tachometer indicators were found. Engine tachometer indicators are generally a reliable investigative tool when analyzing an aircraft crash. The indicators ordinarily will capture the engine RPM at the time of impact. In this case however, the engine tachometer data available from the tachometers contradicts the majority of other evidence available, and are therefore, considered unreliable indicators of the engine RPM at the time of impact.

(j) Eight fuel flow indicators were found and considered to be inconclusive.

(k) The total fuel quantity indicator retained its position on impact. The internal mechanism revealed that the gear mechanism was in a position that correlated to 73,920 pounds.

(l) Exhaust gas temperature indicator data was considered to be inconclusive.

(m) Oil pressure indicators were damaged by the impact and are unreliable.

(n) The total fuel quantity indicator will retain its position on impact. The internal mechanism revealed that the gear mechanism was in a position that correlated to 73,920 pounds.

(o) Hydraulic pressure indicators--no readings could be obtained.

(p) Flap position indicator--damaged to the extent that no reading could be obtained.

(q) Lateral trim indicator--no reading could be obtained.

(r) Accelerometer "G" meter--readings were captured at impact. The internal mechanism was in a position that correlated to the following readings:

Positive Pointer	+4G
Negative Pointer	-2G
Carrier Pointer	+1G

Nothing was noted during the analysis that indicated instrument or instrument system failure prior to impact or loss of input signal. (Tab J-2 to J-9)

m. **Operations Personnel and Supervision.** The flight was authorized by Lt Col Kenneth S. Huston, as the 325th Bomb Squadron Operations Officer, on Air Combat Command Form 50, Flight Order, IAW AFR 60-1. (Tab AA-15.1) The crew was authorized to conduct their own briefings. No other supervisory personnel participated their mission planning and briefing. The 92nd Bomb Wing Deputy Operations Group Commander, 453d Operations Group Commander, and the Supervisor of Flying were on the airfield and watched the practice flight. None of these individuals realized the AA was in trouble until just prior to impact, or realized the flight profile was in violation of directives as it looked like the previous practice and the previous years' air shows. The 92nd Bomb Wing Commander was on base but was not observing the practice.

n. **Crew Qualifications.** (Tab G)

(1) Col Robert E. Wolff, 92nd Bomb Wing Vice Commander, was an experienced command pilot with 3696.9 hours total flying time and 3208.3 hours in the B-52. He was attached to the 325th Bomb Squadron for flying purposes. He was current in all B-52 training pertinent to the flight except for the following ACCR 51-50 Vol 22 or ACCR 55-2 training events: I001, Instrument Approach; P008, Takeoff; P013, Landing; LS01, Local Area Survival (aircraft ejection and egress are included); LS07, Egress Ejection Training; and LS09 Hanging Harness. (Tabs G-18, G-23, AA-6.6, AA-6.8, and AA-7.2)

(2) Lt Col Arthur A. Holland, Chief of the 92 Operations Group Standardization and Evaluation Branch, was an experienced command pilot with 5275.3 hours total flying time, with 5038.3 hours in the B-52. He was attached to the 325th Bomb Squadron for flying purposes. He

was current in all B-52 training pertinent to the flight except for the following ACCR 51-50 Vol 22 or ACCR 55-2 training events: I001, Instrument Approach; G925, Instrument Independent Aircrew Training Device (ATD); LS01, Local Area Survival (aircraft ejection and egress are included); and LS07, Egress Ejection Training. (Tabs G-1, G-2, AA-6.5, AA-6.8, AA-6.9, and AA-7.2)

(3) Lt Col Mark C. McGeehan, Commander of the 325th Bomb Squadron, was an experienced senior pilot with 3170.3 hours total flying time and 2842.5 hours in the B-52. He was current in all B-52 training pertinent to the flight except for the following ACCR 51-50 Vol 22 or ACCR 55-2 training events: I001, Instrument Approach; G925, Instrument Independent ATD; LS01, Local Area Survival (aircraft ejection and egress are included); and LS07, Egress Ejection Training. (Tabs G-7, G-9, AA-6.5, AA-6.8, AA-6.9, and AA-7.2)

(4) Lt Col Kenneth S. Huston, Operations Officer of the 325th Bomb Squadron, was an experienced senior radar navigator with 3378.1 hours total flying time and 2916.4 hours in the B-52. He was current in all B-52 training pertinent to the flight.

(5) All of the crew members, except Lt Col Huston, were non-current for ACCR 55-2 required egress training events. This training event is required by ACCR 55-2 prior to flight. (Tab AA-7.3) The delinquent crew members had not reaccomplished the training.

Lt Col McGeehan's Individual Training Summary shows that he was non-current for P008, Takeoff, P13, Landing, and P097, Touch-and-Go landings. (Tab G-7) Lt Col Holland's Individual Training Summary shows that 24 June 94 was his last day of currency for P008, Takeoff, P13, Landing, and P097, Touch-and-Go landings. (Tab G-1) The board was able to determine that Lt Col Holland and Lt Col McGeehan flew on 17 June 94 and accomplished these currency events. (Tab V-8.22 and AA-16.1) This information was not included in the Individual Training Summary because the AF Form 3526, Event Accomplishment Report, was never completed and turned in to receive credit for accomplishment as directed in ACCR 51-50 Vol 22. (Tab V-46 and AA-6.2) However, both pilots were non-current for an I001, Instrument Approach, and should have been placed in supervised status for that event until accomplishing the event with a current instructor pilot. (Tab AA-6.3) The flight exhibition profile did not necessarily require an instrument approach to be flown.

The flying information presented below was generated from the flight records computer data base. (Tab G)

<u>NAME</u>	<u>TOTAL TIME*</u>	<u>B-52 TIME*</u>	<u>30/60/90 DAY INFO</u>	
			<u>FLY TIME*</u>	<u>SORTIES</u>
Col Wolff	3696.9	3208.3	0.0/1.4/2.4	0/1/2
Lt Col Holland	5275.3	5038.3	1.0/5.5/5.5	1/3/3
Lt Col McGeehan	3170.3	2842.5	1.0/9.7/17.3	1/5/6
Lt Col Huston	3378.1	2916.4	1.0/4.1/4.1	1/3/3

* In hours

(6) There were no indications in any of the crew's training or qualification records of air discipline deviations.

o. **Medical.** All crew members were medically qualified for flight at the time of the accident. There were no disqualifying medical, psychological, or physiological discrepancies in the crew members' histories.

1. Colonel Robert E. Wolff expired due to multiple extreme injuries. Toxicological studies were negative. (Tab X-1 and X-5)

2. Lieutenant Colonel Arthur A. Holland expired due to multiple extreme injuries. Toxicological studies were negative. (Tab X-1 and X-2)

3. Lieutenant Colonel Mark C. McGeehan expired due to multiple extreme injuries. Toxicological studies were negative. (Tab X-1 and X-4)

4. Lieutenant Colonel Kenneth S. Huston expired due to multiple extreme injuries. Toxicological studies were negative. (Tab X-1 and X-3)

p. **Navigational Aids and Facilities.** All navigational aids and facilities were operating normally except for the Instrument Landing System (ILS). The ILS had been released to maintenance for preventative maintenance inspections. (Tab AA-23.1) This was not required for the exhibition profile and had no impact on the AA.

q. **Weather.** There was no significant weather in the area at the time. Cloud cover was virtually nonexistent. Visibility was estimated at better than 10 miles. Winds observed at the time of the accident were 207 degrees at 11 knots. (Tab W-2)

r. **Directives and Regulations.**

(1) The following publications were applicable to the mission:

FAR Part 91
AFI 11-209
AFR 60-1
AFR 60-16
ACCR 51-50 Vol 22
ACCR 55-2
ACCR 55-18
ACCR 55-152
T.O. 1B-52G-1-11
T.O. 1B-52H-1-1
T.O. 14P3-4-151

General Operating and Flight Rules
Air Force Participation in Aerial Events
Flight Management
General Flight Rules
B-52 Crew Training
Life Support Program
ACC Participation in Aerial Events
B-52 Operating Procedures
Pilots' Flight Manual
Flight Manual Performance Data
HGU 55/P Flyers Helmet

(2) The following violations of regulations and technical order guidance were found:

(a) FAR Part 91.

(1) Sub Part 91.117(a). Aircraft Speed. Unless otherwise authorized by the Administrator, no person may operate an aircraft below 10,000 feet MSL at an indicated airspeed of more than 250 knots. (Tab AA-3.2)

(2) Sub Part 91.119. Minimum safe altitudes: General. "Except when necessary for takeoff or landing, no person may operate an aircraft below the following altitudes: (c) Over other than congested areas. An altitude of 500 feet above the surface, except over open water or sparsely populated areas. In those cases, the aircraft may not be operated closer than 500 feet to any person, vessel, vehicle, or structure." (Tab AA-3.3)

(3) Sub Part 91.303. Aerobatic flight. "No person may operate an aircraft in aerobatic flight. (c) Within the lateral boundaries of the surface areas of Class B, Class C, Class D, or Class E airspace designated for an airport. (d) Below an altitude of 1,500 feet above the surface. For the purposes of this section, aerobatic flight means an intentional maneuver involving an abrupt change in an aircraft's attitude, an abnormal attitude, or abnormal acceleration, not necessary for normal flight." (Tab AA-3.3A) The airspace surrounding Fairchild AFB is Class C airspace.

(b) AFR 11-209.

(1) Paragraph 7.1. Showmanship and Professionalism. "In developing and performing aerial events, supervisors and participants should remember the objective is to demonstrate Air Force professionalism and competence to the general public, and not to impress peers. Strict compliance to show lines and minimum altitudes reflects both professionalism and good showmanship ..." (Tab AA-4.1A)

(2) Paragraph 7.3.2. Fly overs Over a Non congested Area. "Single aircraft ... over non congested areas--500 feet AGL." (Tab AA-4.1A)

(3) Paragraph 7.3.3. Lower Minimum Altitudes (Fly overs). "In certain cases, such as demonstration team performances, approved maneuvers packages, and entry and exit into the fly over areas, the FAA may specifically waive the altitude requirements above. Even if the FAA authorizes a lower altitude, US Air Force controlled aircraft must not be flown lower than the following minimum altitudes: Single Aircraft Fly overs. 250 feet AGL. (Tab AA-4.1A)

(4) Paragraph 7.3.4. Lower Minimum Altitudes (Demonstrations). "Any aerial demonstration by US Air Force aircraft ... that is intended to show their combat capabilities may require lower minimum altitudes than those specified in paragraphs 7.3.1 and 7.3.2. Each MAJCOM sets minimum altitudes for safe operations of their assets. All demonstrations must

follow MAJCOM approved profiles that specify the minimum altitude for each maneuver." (Tab AA-4.1A)

(5) Figure A2.1 Approval for On-base Aerial Events. Requires MAJCOM approval for fly overs and demonstrations. (Tab AA-4.2)

(c) AFR 60-16.

(1) Paragraph 1-1d states that "the FARs govern Air Force pilots and nothing in this regulation relieves the pilot of the responsibility to follow them." (Tab AA-5.7)

(2) Paragraph 1-4 states that "An ATC clearance is not authority to deviate from this regulation." (Tab AA-5.7)

(3) Paragraph 5-1 says "Pilots must not operate Air Force aircraft in a careless or reckless manner or endanger life or property." (Tab AA-5.7A)

(4) Paragraph 5-7b states that aircraft must "...not exceed 250 KIAS below 10,000 feet MSL, unless the MAJCOM has approved a higher speed according to the FAR 91.117(a) exemption." (Tab AA-5.8)

(d) ACCR 51-50 Vol 22.

(1) Paragraph 4-4a(2). Recurrency: Individuals delinquent in one or more mission ready flight currency events are placed in supervised status for that event and declared non-mission ready. (Tab AA-6.3)

(e) ACCR 55-2.

(1) Paragraph 3-3i(1)(a)1. Egress/hanging harness class currency is 180 days. (Tab AA-7.2)

(2) Paragraph 3-3j states "If an aircrew is delinquent in egress/ejection, hanging harness/personal lowering device,... the training must be accomplished prior to the next flight." (Tab AA-7.3)

(3) Paragraph 6-8c. "Prior to each takeoff, aircraft commander's designated representative will ensure that all prepositioned life support equipment is properly inventoried, that equipment is serviceable, and will sign and date the certification block of the AFTO Form 46." (Tab AA-7.4)

(f) ACCR 55-18.

(1) Paragraph 2.2b. Altitude. "Unless otherwise noted, the minimum altitude will depend upon specific location and obstacle clearance and will be no lower than 500 feet AGL." (Tab AA-4.14)

(g) ACCR 55-152.

(1) Paragraph 2.5.3.3 All crew members in the formation require a formation briefing. (Tab AA-8.2)

(2) Paragraph 7.5 Steep turns. "Limit the maximum target bank angle to 45 degrees (not to exceed 50 degrees)." It further states "For steep turns at or below 5,000 feet AGL, the following restrictions apply: The maneuver must be accomplished at or above 1,000 feet AGL." (Tab AA-8.3)

(h) T.O. 1B-52G-1-11.

(1) page 2-132. Circling Approach. "Maintain 20 knots above best flare speed during the circling maneuver until beginning the roll out to align with the runway. Bank angle should be limited to 30 degrees throughout the maneuver." (Tab AA-2.2)

(2) page 2-136. Approach procedure (Visual Pattern). "A 30 degree bank will be the maximum allowable in the traffic pattern." (Tab AA-2.3)

(3) page 4-2. Crew Coordination. "The pilot at the controls will be notified immediately of any deviation from published procedures." (Tab AA-2.6A)

(4) page 4-2. Crew Coordination. "WARNING" "If an apparent error in aircraft attitude is detected, the pilot flying the aircraft will be advised immediately. The pilot not flying the aircraft will also monitor the engine instruments." (Tab AA-2.6A)

(5) page 5-23. Prohibited Maneuvers. Acrobatics of any kind are strictly prohibited. (Tab AA-2.15)

(i) T.O. 1B-52H-1-1.

(1) Page A11-1. Refueling and Distribution Log (AFTO Form 6). This log will remain with the aircraft Form 781 until has been checked and signed by the pilot during the Interior Inspection. (Tab AA-1.2)

(j) T.O. 14P3-4-151.

(1) Paragraph 5-26. Preflight Inspection. Prior to each flight, the user shall inspect the helmet to determine that it is in serviceable condition. This inspection shall assure that: a. The helmet, ear cups, and oxygen mask are properly fitted." (Tab AA-7.6)

3. STATEMENT OF OPINION:

Under 10 U.S. Code 2254(b) any opinion of the accident investigators as to the cause of or factors contributing to, the accident set forth in the accident investigation report may not be considered as evidence in any civil or criminal proceedings arising from an aircraft accident, nor may such information be considered an admission of liability by the United States or by any person referred to in those conclusions or statements.

This Accident Board's investigation determined that the allegations contained in Mr. Pearce's letter were essentially correct, and Lt Col McGeehan's and other crew members' concerns over Lt Col Holland's reckless flying style were justified. The board reviewed several specific instances of Lt Col Holland flying in violation of the Dash 11, USAF, ACC, or FAA regulations.

Based upon clear and convincing evidence, my opinion is that the 24 June 1994 aircraft accident was the result of pilot error, crew error, and several breakdowns in supervision / leadership. The accident was preventable. Causes are as follows:

CAUSE

(a) **Pilot Error** - On 24 June 1994, Lt Col Holland piloted the aircraft in a manner that violated regulatory provisions and flight manual guidance, which placed the aircraft outside viable flight parameters at an altitude and attitude where recovery was not possible. Lt Col Holland, by exceeding bank angles, speed, and altitude restrictions for maneuvering the aircraft during a circling approach, flew the aircraft into a stalled condition, departed controlled flight, and impacted the ground.

(b) **Airmanship** - The accident crew, perhaps not recognizing a dangerous situation developing, allowed the pilot to enter into a stalled condition.


(c) **Supervision/Leadership** - Dating from 1991, the pilot, Lt Col Arthur A. Holland, had an established history of overly aggressive flying and poor airmanship. This long term behavior was not readily apparent to the wing leadership and he was allowed to continue to fly. The wing's history of numerous leadership changes, during the period of 1991 to 1994, contributed to the failure to identify and resolve the problem. These leadership changes resulted in a lack of continuity in understanding Lt Col Holland's airmanship and tracking B-52 operations. Lt Col Holland's poor airmanship could have been masked by the credibility inherent in his position as the Chief of Standardization and Evaluation, the senior, most experienced B-52 pilot in the wing, and previous duty as a MAJCOM B-52 evaluator.

(d) **Supervision/Leadership** - The 92nd Operations Group commander and his staff lacked an adequate understanding of regulations concerning air shows and the bank angles permitted by the Dash 11 in the traffic pattern. They recommended an air show exhibition that was not in compliance with USAF and ACC regulations and the aircraft flight manual. Portions of this profile were rejected by the 92nd Bomb Wing commander because of its aggressiveness.

He did not direct the operations group to accomplish a total review of air show criteria after rejecting their profile. The wing commander ordered a flight profile that was less aggressive but was still not in compliance with ACC regulations and the Pilots' Flight Manual. This led to a B-52 air show exhibition profile that was not sanctioned by ACC nor complied with regulations or the Dash 11. Lt Col Holland, despite the orders given him by the wing commander, flew a very reckless profile and ignored those orders, without being curtailed by onboard supervisors including the squadron commander, an instructor navigator, and the vice wing commander.

Had the Operations Group sought clarification of a permissible exhibition profile and the required authority, after being questioned by the wing commander, it is likely that HQ ACC would have become aware of the planned unauthorized maneuvers and disapproved the request for this exhibition profile.

(e) Supervision/Leadership - The Operations Group Commander, after flying the exhibition profile the week before, did not realize it was contrary to regulations or good air discipline, and did not direct the profile be changed to bring it into compliance.


MICHAEL G. MCCONNELL, Colonel, USAF
AFR 110-14 Accident Investigation Board President

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A

FOR OFFICIAL USE ONLY (When filled in)

USAF MISHAP REPORT

(Fill in all spaces applicable. If additional space is needed, use additional sheet(s).)

1. DATE OF OCCURRENCE (Day, Month and Year) 24 Jun 94	2. VEHICLE(S) OR MATERIEL INVOLVED (Model designation and serial no. if applicable) B-52H-170 61-026	3. FOR GROUND ACCIDENTS ONLY (Base Code and Report Serial No.)
4. PLACE OF OCCURRENCE. STATE, COUNTY, DISTANCE AND DIRECTION FROM NEAREST TOWN. IF ON BASE, IDENTIFY. IF OFF BASE, GIVE DISTANCE FROM NEAREST BASE. Washington, Spokane, 4 miles SW Airway Heights. Fairchild AFB 47°36'29"N 117°39'2"W		5. HOUR AND TIME ZONE LOCAL 14:16 PST
		6. <input checked="" type="checkbox"/> DAY <input type="checkbox"/> NIGHT <input type="checkbox"/> DAWN <input type="checkbox"/> DUSK

7. ORGANIZATION POSSESSING OR OWNING VEHICLE OR MATERIEL AT TIME OF MISHAP						
MAJOR COMMAND	SUBCOMD OR AF	AIR DIVISION	WING	GROUP	SQ OR UNIT	NAME & BASE CODE
ACC	12 AF		92 BW	92 OG	325 BS	GJKZ Fairchild AFB

8. (List organizations of second vehicle, if they differ from item 7 above)						

9. ORGANIZATION AND BASE SUBMITTING REPORT (Do not abbreviate)						
Twelfth Air Force, Davis-Monthan Air Force Base, Arizona						

10. LIST OF PERSONNEL DIRECTLY INVOLVED (See AFR 137-3 for specific instructions)						
LAST NAME, FIRST NAME, MIDDLE INITIAL	GRADE	SSAN	ASSIGNED DUTY	AERO RATING	DEGREE INJURY (Use Abbr)	DAYS LOST ON TT ONLY
Wolff, Robert E.	Col		FP	Cmd Plt	F	
Holland, Arthur A.	Lt Col		IP	Cmd Plt	F	
McGeehan, Mark C.	Lt Col		IP	Sr Plt	F	
Huston, Kenneth S.	Lt Col		MR	Mst Nav	F	

11. (Enter applicable letter(s) in DEGREE INJURY column. None-N; Temporary Total-TT; Permanent Partial-PP; Permanent Total-PT; Fatal-F; Missing-M)						
--	--	--	--	--	--	--

12. FACTUAL SUMMARY OF CIRCUMSTANCES. GIVE A DETAILED HISTORY OF FLIGHT OR CHRONOLOGICAL ORDER OF FACTS AND CIRCUMSTANCES LEADING TO THE MISHAP. THE RESULTS OF INVESTIGATION WILL BE CONTAINED IN THE "ANALYSIS PART" OF THE REPORT. ANALYSIS OF AND CONCLUSIONS DRAWN FROM ORAL OR WRITTEN STATEMENTS OBTAINED ONLY IN THE INTEREST OF MISHAP PREVENTION WILL NOT BE INCLUDED IN THIS SUMMARY.						
--	--	--	--	--	--	--

Mission Profile: The mishap crew (MC) planned a training flight for a local airshow. The mission profile started with a takeoff on Runway 23 followed immediately by a left, 360 degree climbing turn around the tower. Then the MC turned approximately 30 degrees right of runway heading, continued the climb, and retracted flaps. The mishap aircraft (MA) turned left, descended for a low altitude, medium speed pass down Runway 05, and turned left approximately 30 degrees of runway heading to set up for a high-speed pass to Runway 23. At approximately midfield, the MC started a pull up to a high pitch angle climb with a low-G pushover at the top. Then, the aircraft offset right and started a descending left teardrop to Runway 05 for a pass at pattern altitude. At the end of the runway, the MC started a left turn for a closed pattern and extended the flaps. The MC extended the landing gear and turned left base for a landing attitude demonstration. At midfield, the MC started a left, climbing, 90 degree turn and retracted the gear. The MC turned 90 degrees right to a modified downwind, turned base with the gear up, and completed the right turn to final for a low approach to Runway 23. At the end of the runway the MC made a right turn to a closed downwind, then turned base while extending the landing gear. After rolling out on heading to Runway 23, the MC started a go-around due to another aircraft on the runway and shifted left of the runway while maintaining a low altitude. At approximately midfield, the MC requested and was cleared for a 360 degree turn for spacing and accomplished a low altitude turn around the tower. At approximately three quarters of the way around the turn, the aircraft impacted the ground. MP2 attempted ejection, out of the ejection envelope, and the ejection sequence was interrupted by ground impact. Aircraft was destroyed and all crewmembers were fatally injured.

13. AUTHENTICATION			
CERTIFICATION BY (Title)	TYPED NAME AND GRADE	SIGNATURE	DATE
ANIB President	JOHN C. MOORE, Colonel	<i>John C Moore</i>	18 Jun 94

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O ANY ADDITIONAL SUBSTANTIATING DATA REPORTS
Q ORDERS APPOINTING INVESTIGATING BOARD
R DIAGRAMS (FALLOUT-IMPACT AREA)
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AIRCRAFT FLIGHT MISHAP REPORT

(To be filled out for principal aircraft involved. Appropriate items only should be filled out on secondary aircraft.)

1. MISHAP CLASS <input checked="" type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input checked="" type="checkbox"/> DEST		2. ACFT MDS & SERIAL NO B-52H-170 61-026		3. DATE 94-06-24		4. UNIT CONTROL NO. 603		5. ACFT ASSIGNMENT/STATUS CODE CC		
6. PILOT(S) INVOLVED (FLIGHT CREW) ¹										
7. OPERATOR AT CONTROLS					8. COMPONENT					
A. LAST NAME, INITIALS					B. COMPONENT					
9. POSITION IN AIRCRAFT AT TIME OF MISHAP										
FRONT SEAT		LEFT SEAT		REAR SEAT		RIGHT SEAT		JUMP SEAT		
D. NATIONALITY					E. AGE					
F. MAJCOM, NAF, DIV, WG, SQ ASSIGNED					G. MAJCOM, NAF, DIV, WG, SQ ATTACHED FOR FLYING					
10. OTHER PILOT										
A. LAST NAME, INITIALS HOLLAND, R.E.					B. COMPONENT REG AF					
C. POSITION IN AIRCRAFT AT TIME OF MISHAP										
FRONT SEAT		LEFT SEAT		REAR SEAT		RIGHT SEAT		JUMP SEAT		
D. NATIONALITY USA					E. AGE 46					
F. MAJCOM, NAF, DIV, WG, SQ ASSIGNED ACC, 12 AF, 92 BW, 92 OG					G. MAJCOM, NAF, DIV, WG, SQ ATTACHED FOR FLYING ACC, 12 AF, 92 BW, 325 BS					
11. OTHER PILOT										
A. LAST NAME, INITIALS MCGEEHAN, M.C.					B. COMPONENT REG AF					
C. POSITION IN AIRCRAFT AT TIME OF MISHAP										
FRONT SEAT		LEFT SEAT		REAR SEAT		RIGHT SEAT		JUMP SEAT		
D. NATIONALITY USA					E. AGE 38					
F. MAJCOM, NAF, DIV, WG, SQ ASSIGNED ACC, 12 AF, 92 BW, 325 BS					G. MAJCOM, NAF, DIV, WG, SQ ATTACHED FOR FLYING					
12. OTHER PILOT										
A. LAST NAME, INITIALS WOLFF, R.E.					B. COMPONENT REG AF					
C. POSITION IN AIRCRAFT AT TIME OF MISHAP										
FRONT SEAT		LEFT SEAT		REAR SEAT		RIGHT SEAT		JUMP SEAT		
D. NATIONALITY USA					E. AGE 46					
F. MAJCOM, NAF, DIV, WG, SQ ASSIGNED ACC, 12 AF, 92 BW					G. MAJCOM, NAF, DIV, WG, SQ ATTACHED FOR FLYING ACC, 12 AF, 92 BW, 325 BS					
13. CLEARANCE										
FROM KSKA					TO KSKA					
<input checked="" type="checkbox"/> VFR		<input type="checkbox"/> IFR		<input checked="" type="checkbox"/> LOCAL		<input type="checkbox"/> PT TO PT		<input type="checkbox"/> DIRECT		
<input type="checkbox"/> AIRWAYS		<input type="checkbox"/> NO CLEARANCE		<input type="checkbox"/> NA						
14. DURATION OF FLIGHT			15. TYPE OF MISSION			16. ALTITUDE/ELEVATION				
HOURS 0		TENTHS 3		T-3M			2462MSL			
17. PHASE OF OPERATION APPROACH					18. TYPE OF MISHAP COLLISION WITH THE GROUND					
19. METEOROLOGICAL CONDITIONS										
20. AIRFIELD DATA APPLICABLE TO TAKEOFF AND LANDING MISHAPS OCCURRING WITHIN 2 MILES OF AIRFIELD										
A. FIELD ELEVATION (Feet) 2462			B. COMPOSITION OF RUNWAY <input type="checkbox"/> ASPHALT <input checked="" type="checkbox"/> CONCRETE <input type="checkbox"/> OTHER (Specify)							
C. LENGTH OF RUNWAY (Feet) 13901		D. RUNWAY HEADING 229.0		E. DISTANCE OF TOUCHDOWN FROM RUNWAY (Feet) 6887		F. SURFACE CONDITION <input checked="" type="checkbox"/> DRY <input type="checkbox"/> WET <input type="checkbox"/> OTHER (Specify)				
G. LENGTH OF OVERRUN 1000		H. COMPOSITION OF OVERRUN (Specify) ASPHALT		I. BARRIER TYPE: BAK-12 (B) USED: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO LOCATION: 1500' DOWN 23						
21. CONDITIONS AFFECTING OCCURRENCE (For example, type of instrument or lighting approach used, obstruction, barrier, draped, gross weight, forced landing)										

¹If more than four pilots are involved (Flight Crew) report same information required on additional sheet for each.

AF FORM 711b PREVIOUS EDITION IS OBSOLETE.

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K DD FORM 175, MILITARY FLIGHT PLAN
L DD FORM 365F, WEIGHT AND BALANCE CLEARANCE FORM F - TACTICAL
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AIRCRAFT MAINTENANCE AND MATERIEL REPORT

1. AIRCRAFT SERIAL NUMBER 61-0226										2. MISSION DESIGN AND SERIES (MDS) B - 52H - 170														
3. HISTORICAL DATA																								
AIRCRAFT										DEFICINT PART COMPONENT OR ACCESSORY														
AIR FORCE ACCEPTANCE DATE					2 Jun 62					NOM														
TOTAL FLIGHT HOURS					12,721.5					PART NUMBER														
LAST OVERHAUL DATE					1 May 92					T.O. REFERENCE														
OVERHAULING ACTIVITY (Name & Loc)					SA/ALC KAFB, TX					FIGURE														
HOURS SINCE OVERHAUL					741.5					INDEX														
HOURS SINCE LAST SCHEDULED INSP.					232.3					WORK UNIT CODE														
DATE OF LAST SCHEDULED INSPECTION					11 Aug 93					TDR REQUESTED					YES NO YES NO									
TYPE OF LAST SCHEDULED INSPECTION					2 Phase Inspect					MOR SUBMITTED					YES NO YES NO									
DATE ASSIGNED PRESENT ORGN.					14 May 92					MOR NUMBER														
ORGN. TRANSFERRED FROM					Carswell AFB TX					MIP NUMBER														
ENGINE (Complete a Column for each Engine)																								
INSTALLED POSITION					NUMBER 1					NUMBER 2					NUMBER 3					NUMBER 4				
ENGINE MODEL AND SERIES					TF33-P-3					TF33-P-3					TF33-P-3					TF33-P-3				
ENGINE SERIAL NUMBER					P643200					P643036					P642259					P643188				
TOTAL ENGINE HOURS					2129.2					4309.8					4160.8					3112.9				
NUMBER OF MAJOR OVERHAULS					4					4					4					5				
HRS SINCE LAST MAJOR OVERHAUL					2129.2					4309.8					4160.8					3112.9				
DATE OF LAST OVERHAUL					21 Mar 86					28 Feb 83					27 Sep 82					21 Mar 85				
OVERHAUL ACTIVITY					OC/ALC					OC/ALC					OC/ALC					OC/ALC				
DATE LAST INSTALLED					7 Apr 94					4 Apr 94					8 Mar 94					22 Mar 94				
HOURS SINCE LAST INSTALLED					23.0					17.7					19.9					17.7				
DATE OF LAST SCHEDULED INSPECTION					7 Apr 94					4 Apr 94					8 Mar 94					22 Mar 94				
TYPE OF LAST SCHEDULED INSPECTION					Installation					Installation					Installation					Installation				
FUEL (Type & Octane Rating)					JP-4					JP-4					JP-4					JP-4				
TDR REQUESTED																								
4. SOAP SAMPLES (Engine, CSD, Gearbox or APU failure of which occurred or was suspected)																								
ITEM AND SERIAL NUMBER																								
HOURS SINCE O/H OIL CHANGE										HOURS SINCE O/H OIL CHANGE														
5. DAMAGED AIRCRAFT (Furnish complete damage information under Tab "L". See AF Form 11th)																								
DAMAGE TO AIRCRAFT <input checked="" type="checkbox"/> DESTROYED OR DAMAGED BEYOND ECONOMICAL REPAIR <input type="checkbox"/> SUBSTANTIAL <input type="checkbox"/> MINOR <input type="checkbox"/> LESS THAN MINOR OR NONE										MANHOURS TO REPAIR N/A					COST (ESTIMATE) N/A									
6. FIRE DATA (To be completed when fire or chemical explosion occurs, not resulting from ground impact. Indicate: P - Probable or K - Known, in squares)																								
A. MATERIEL FAILURE CAUSING THE FIRE										B. IGNITION SOURCE					C. COMBUSTIBLE MATERIAL									
ELECTRICAL SYSTEM		PROPULSION SYSTEM		ELECTRICAL SYSTEM		STATIC ELECTRICITY/LIGHTNING		CARGO		HYDRAULIC FLUID														
FUEL SYSTEM		BLEED AIR SYSTEM		PNEUMATIC SYSTEM		OTHER (Specify) High		ELECTRICAL INSULATION		LUBRICATING OIL														
HYDRAULIC SYSTEM		OTHER (Specify)		PROPULSION SYSTEM		Voltage Power Lines		EXPLOSIVES		OTHER (Specify)														
PNEUMATIC SYSTEM		UNKNOWN		BLEED AIR		UNKNOWN		FUEL		UNKNOWN														
7. LOCATION OF INITIAL FIRE																								
KNOWN PROBABLE										KNOWN PROBABLE														
BAGGAGE COMPARTMENT										WHEEL WELL														
FOND BAY										CARGO-PASSENGER COMPARTMENT														
OCCUPIT OR CREW QUARTERS										OTHER (Specify) LE Wing														
ENGINE SECTION										UNKNOWN ()														
8. MISCELLANEOUS CHEMICAL EXPLOSION DATA																								
KNOWN PROBABLE										KNOWN PROBABLE														
INITIAL IGNITION OCCURRED IN AN EXPLOSIVE MANNER PRIOR TO GROUND IMPACT.										INTENSITY OF EXPLOSION WAS SUFFICIENT TO CAUSE OR APPRECIABLY CONTRIBUTE TO IN-FLIGHT AIRFRAME BREAK-UP.														
EXPLOSION OCCURRED AFTER FIRE & BEFORE GND IMPACT.										OTHER SIGNIFICANT DATA (Specify)														
EXPLOSION OCCURRED SUBSEQUENT TO GROUND IMPACT.										UNKNOWN OR NOT AVAILABLE														

2000

AF FORM 7-1c PREVIOUS EDITION IS OBSOLETE.

When filled in

USAF AIRCRAFT ACCIDENT INVESTIGATION REPORT INDEX TAB FORM

A AF FORM 711 - USAF MISHAP REPORT
C AF FORM 711b - AIRCRAFT MISHAP REPORT
D AF FORM 711c - AIRCRAFT MAINTENANCE AND MATERIAL REPORT
G FLIGHT AND PERSONNEL RECORDS
H AFTO FORMS 781
I MATERIAL DEFICIENCY REPORTS
J TECHNICAL AND ENGINEERING EVALUATIONS OF MATERIAL (DOD)
K DD FORM 175, MILITARY FLIGHT PLAN
L DD FORM 365F, WEIGHT AND BALANCE CLEARANCE FORM F - TACTICAL
M CERTIFICATE OF DAMAGE
N TRANSCRIPTS OF RECORDED COMMUNICATIONS
O ANY ADDITIONAL SUBSTANTIATING DATA REPORTS
Q ORDERS APPOINTING INVESTIGATING BOARD
R DIAGRAMS (FALLOUT-IMPACT AREA)
S PHOTOGRAPHS
T INDIVIDUAL FLIGHT RECORDS
V TESTIMONY AND STATEMENTS OF WITNESSES
W WEATHER OBSERVATIONS
X STATEMENTS OF INJURY OR DEATH
Y DOCUMENTS APPOINTING ACCIDENT INVESTIGATION BOARD
Z PHOTOGRAPHS NOT INCLUDED IN PART I OF SAFETY REPORT
AA SUPPORTING ADDITIONAL DATA

G

06 JUL 94 (10:08:48)

INDIVIDUAL TRAINING SUMMARY

EVENT MASK ****

NAME HOLLAND ARTHUR A

TYPE-TNG C

ACFT H

CREW POS EPDX

EVENT	ID	A1	A2	A3	A4	A5	A6	DL	C	DD
HI/LOW BOMB	B001	00/00/00	10/12/30	940310						940509
C-HI ALT CO	B002	00/00/00	00/01/05	940216						000000
MED ALT CON	B003	00/00/00	00/00/00	000000						000000
HI ALT SIOP	B008	00/00/00	00/01/05	940223						000000
LO/ALT MINE	B026	00/00/00	00/01/01	940210						000000
C-LW A CONV	B034	00/00/00	10/07/08	940310						000000
S-LO SIOP B	B035	00/00/00	00/03/12	940223						000000
4X SORTIE	BX04	00/01/00	02/02/19	940503						000000
4X DUR TEN	BX05	00/10/00	00/00/00	940510						000000
4X DUR ONE	BX06	00/04/00	03/20/06	940510						000000
4X DUR TEN	BX07	00/15/00	03/15/15	940510						000000
CTSS	BX10	00/00/00	02/01/06	940323						000000
CTS DUR TEN	BX11	00/00/00	00/00/00	000000						000000
CTS DUR ONE	BX12	00/00/00	13/06/12	940323						000000
CTS DUR TEN	BX13	00/00/00	02/00/07	940310						000000
INSTRU APPR	I001	00/01/00	04/09/27	940503						940617
MISSED APPR	I010	00/01/00	00/04/11	940503						000000
L/A N/LEG D	N015	00/00/00	01/04/11	940310						940509
SORTIE	P002	00/02/00	04/04/32	940510						000000
C- HAVE QUI	P007	00/00/00	00/01/00	940201						000000
TAKOFF	P008	00/02/00	04/04/34	940510						940624
LANDING	P013	00/07/00	06/11/40	940510						940624
SIM ENG LOS	P015	00/00/00	01/02/04	940315						000000
LANDING (NI	P016	00/00/00	02/02/19	940323						940721
FLAP UP APP	P021	00/00/00	00/02/03	940216						000000
CELL FORM	P022	00/00/00	00/03/02	940216						000000
S- MITO	P024	00/00/00	00/00/01	931207						941207
VISUAL FATT	P036	00/06/00	02/03/20	940510						000000
SIM 6ENG AP	P063	00/00/00	00/02/05	940216						000000
PILOT PRO	P070	00/00/00	00/01/03	940210						940809
TOUCH-GO LN	P097	00/07/00	06/09/32	940510						940624
S-PLZT G-IN	P106	00/00/00	00/00/02	940106						950106
AIR REFUEL	R001	00/00/00	01/04/14	940310						940424
NIGHT A/R	R005	00/00/00	00/00/05	940106						940506
FORM BMB PR	T002	00/00/00	00/01/01	940201						000000
C-NVG EXERC	T101	00/00/00	00/00/04	940106						940406
INSTR/EVAL	VF31	00/00/00	00/02/04	940216						000000
KC-10 REFUE	VR41	00/00/00	00/00/00	910212						000000
EPTS	YD01	00/00/00	00/00/01	931103						000000
LO CPTS	YD07	00/00/00	00/00/01	931004						000000
MD/HI CPTS	YD08	00/00/00	00/00/01	931004						000000

06 JUL 94 (10:06:05)

NAME HOLLAND ARTHUR A

INDIVIDUAL TRAINING SUMMARY

TYPE-TNG A

ACFT H

EVENT MASK ****

CREW POS EPDX

EVENT	ID	DL	DD
QUAL CK	AA01	930114	940630
QUAL CHCK	AA02	940214	950731
QUAL/INST C	AA21	930114	940630
CWD	G112	930916	940930
CREW RES MG	G124	931021	941031
NUKE SURETY	G300	930303	940331
UMB	G330	890914	000000
AIRC	G604	940225	000000
HYDRAULICS	G921	930920	940930
FLT CONTROL	G922	930607	940630
ENGINES	G923	940207	950331
ELECTRICS	G924	930222	941231
INSTRUMENTS	G925	881228	891231
FUEL SYS	G926	930920	940930
PNEUMATICS	G927	930920	940930
LOCAL SURVI	LS01	931108	940531
CST	LS02	930101	940131
WATER SURVI	LS03	940302	950331
ACDE/HARNES	LS04	930716	940731
ACDE/EGRESS	LS05	930716	940731
LS EQUIPMEN	LS06	940302	950331
EGRESS/EJEC	LS07	930324	940331
HANGING HAR	LS09	940303	940930
PHYSICAL EX	PP01	930803	940930
PHY REFRESH	PP11	911219	941231
FLT REC CHE	RR01	930805	940930

PERSONAL DATA - PRIVACY ACT OF 1974

AS OF
DATE: 15 JUL 94

INDIVIDUAL FLIGHT DATA

MDS: *****
CREW-POS: *

NAME: HOLLAND ARTHUR A RNK: LTC
AGE: 46 LAST PHYSICAL: 930803 RPI: 6 SSAN: [REDACTED]
DAFSC: 01435Y LAST ALT CHMB: 911219 FAC: 3 ASC: 3A
MAJCOM: SAC

MDS	C	SEQ	TOTAL	PRIMARY	SECOND	INSTR	EVAL	OTHER	COMBAT	CMBT	SPT
B052D	P	00	147.4	54.9	50.3	10.0	21.9	10.3	0.0	0.0	
B052F	P	00	80.5	38.1	42.4	0.0	0.0	0.0	0.0	0.0	
B052G	P	00	1391.4	546.5	425.6	98.0	204.1	117.2	61.1	0.0	
B052H	P	01	3419.0	953.4	490.9	1364.4	497.7	112.6	0.0	0.0	
T037B	P	00	7.9	0.0	0.0	0.0	0.0	7.9	0.0	0.0	
KC135A	P	00	10.1	0.0	0.0	0.0	0.0	10.1	0.0	0.0	
SB052H	P	02	57.0	9.0	9.0	24.0	15.0	0.0	0.0	0.0	
SMB052H	P	00	57.0	6.5	3.5	10.5	35.5	1.0	0.0	0.0	
TOTALS			5170.3	1608.4	1021.7	1506.9	774.2	259.1	61.1	0.0	

CAREER TOTALS

FLYING TIME: ALL 5056.3
PRI/INST TIME: ALL 3065.3

GRAND TOTAL: 5275.3
MDS PRI/INST TIME: 3065.3

PERSONAL DATA-PRIVACY ACT OF 1974

REPORT FOR AIRCRAFT ACCIDENT INVESTIGATION (PA) AS OF 94 JUN 24 PCM SA002-A02

AUDIT LIST

SACC INVEST940624 B052H

PERSONAL DATA-PRIVACY ACT OF 1974

REPORT FOR AIRCRAFT ACCIDENT INVESTIGATION (PA) AS OF 94 JUN 24 PCN SAC02-A02

NAME: HOLLAND ARTHUR A CBO: LTC SSAN: RPI: 6 EAC: 3 ACCIDENT: 3A/39 PAR TC DAFSC: C1435Y AGE: 46
 RJET: 1 MCC: CRB CND: SAC WINS: 0092 BW ORGANIZATION: 0325 ES CPOS: EP CUR RTG: COMMAND PILOT

ACFT TYPE = B052H SERIAL NUMBER = UNKNOWN

*** ACCIDENT AIRCRAFT ***

	PRI	SEC	INST	EVAL	OTH	TOTAL TIME	PRI/INST	NGT	INS	SIM INS	SORT
B052H/EPHX	953.4	490.9	1364.4	497.7	112.6	3419.0	2337.8	524.8	1134.3	244.4	535
LAST 30 DAYS:	0.0	0.3	0.3	0.0	0.0	1.0	0.3	0.0	0.0	0.0	1
LAST 60 DAYS:	1.9	0.3	2.5	0.0	0.6	5.3	4.4	0.0	0.0	0.0	3
LAST 90 DAYS:	1.9	0.3	2.5	0.0	0.6	5.3	4.4	0.0	0.0	0.0	3

*** OTHER ACTIVE AIRCRAFT ***

--NO MORE AIRCRAFT DATA--

5

*** CAREER TOTALS ***

DATES FE/LF	PRI	SEC	INST	EVAL	OTH	TOTAL TIME	PRI/INST	STUD	CMBT	CMST SUPT	SORT
720517/940617	1592.9	1009.2	1472.4	723.7	258.1	5056.3	3065.3	219.0	61.1	0.0	729

NAGA20: 94175

PAGE 2

PERSONAL DATA-PRIVACY ACT OF 1974

PCN. SA002-605

AS/PALEI 24767 Fnn 10
ILD AFB

CAREER TOTALS

50: 94196

PAGE 6

PERSONAL DATA-PRIVACY ACT OF 1974

06 JUL 94 (10:15:51)

INDIVIDUAL TRAINING SUMMARY

EVENT MASK ****
CREW POS IPDX

NAME MCGEEHAN MARK C TYPE-TNG C ACFT H

EVENT	ID	C	C	C	C	C	C	C	C	DD
HI/LOW BOMB	B001	00/03/00	07/03/20	940503	940702					
C-HI ALT CO	B002	00/00/00	00/01/01	940208	000000					
MED ALT CON	B003	00/00/00	00/00/01	930907	000000					
HI ALT SIOP	B008	00/00/00	00/00/02	931214	000000					
LO/ALT MINE	B026	00/00/00	00/01/00	940214	000000					
C-LW A CONV	B034	00/00/00	07/02/09	940328	000000					
S-LO SIOP B	B035	00/03/00	00/00/07	940503	000000					
4X SORTIE	BX04	00/01/00	03/01/06	940503	000000					
4X DUR TEN	BX05	00/00/00	00/00/00	000000	000000					
4X DUR ONE	BX06	00/04/00	10/07/08	940509	000000					
4X DUR TEN	BX07	00/05/00	20/06/09	940503	000000					
CTSS	BX10	00/00/00	03/02/03	940323	000000					
CTS DUR TEN	BX11	00/00/00	00/00/00	000000	000000					
CTS DUR ONE	BX12	00/00/00	17/08/31	940323	000000					
CTS DUR TEN	BX13	00/00/00	10/07/22	940323	000000					
INSTRU APPR	I001	00/04/00	04/03/11	940509	940623					
MISSED APPR	I010	00/00/00	02/01/01	940328	000000					
L/A N/LEG D	N015	00/00/00	03/02/10	940328	940527					
SORTIE	P002	00/01/00	06/03/14	940509	000000					
C- HAVE QUI	P007	00/00/00	00/02/02	940214	000000					
TAKEOFF	P008	00/00/00	03/02/14	940323	940507					
LANDING	P013	00/08/00	07/03/18	940509	940623					
SIM ENG LOS	P015	00/02/00	03/00/04	940503	000000					
LANDING (NI	P016	00/00/00	03/04/13	940309	940707					
FLAP UP APP	P021	00/00/00	00/00/01	940122	000000					
CELL FORM	P022	00/00/00	03/02/08	940323	000000					
S- MITO	P024	00/00/00	00/00/00	930719	940719					
VISUAL PATT	P036	00/04/00	04/05/09	940503	000000					
SIM 6ENG AP	P063	00/00/00	00/00/02	940122	000000					
PILOT PRO	P070	00/00/00	00/00/01	940122	940721					
TOUCH-GO LN	P097	00/00/00	06/02/13	940323	940507					
S-PLZT G-IN	P106	00/00/00	00/00/00	930721	940721					
AIR REFUEL	R001	00/00/00	05/01/16	940328	940512					
NIGHT A/R	R005	00/00/00	00/00/07	940110	940510					
FORM BMB PR	T002	00/00/00	02/01/04	940316	000000					
C-NVG EXERC	T101	00/00/00	00/00/04	940110	940410					
INSTR/EVAL	VF31	00/01/00	01/00/02	940509	000000					
KC-10 REFUE	VR41	00/00/00	00/00/01	931019	000000					
EPTS	YD01	00/00/00	00/00/00	000000	000000					
LO CPTS	YD07	00/00/00	00/00/01	931019	000000					
MD/HI CPTS	YD08	00/00/00	00/00/00	000000	000000					

PERSONAL DATA - PRIVACY ACT OF 1974

AS OF
DATE: 15 JUL 94

INDIVIDUAL FLIGHT DATA

MDS: *****
CREW-POS: *

NAME: MCGEEHAN MARK C RNK: LTC SSAN: [REDACTED]
AGE: 38 LAST PHYSICAL: 931216 RPI: 6 ASC: 2A
DAFSC: N01235C LAST ALT CHMB: 921217 FAC: 3 MAJCOM: SAC

MDS	C	SEQ	TOTAL	PRIMARY	SECOND	INSTR	EVAL	OTHER	COMBAT	CMBT	SPT
B0526	P	00	2570.7	1117.8	983.2	233.7	0.0	236.0	0.0	0.0	
B052H	P	01	271.8	59.3	53.7	148.6	0.0	10.2	0.0	0.0	
C012F	P	00	1.5	0.0	0.0	0.0	0.0	1.5	0.0	0.0	
F015D	P	00	1.5	0.0	0.0	0.0	0.0	1.5	0.0	0.0	
T037B	P	00	139.9	80.5	52.3	0.0	0.0	7.1	0.0	0.0	
SB0526	P	00	88.5	26.8	25.7	36.0	0.0	0.0	0.0	0.0	
SMB052H	P	02	18.0	9.0	8.5	0.0	0.0	0.5	0.0	0.0	
SMT0400	P	00	4.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	
SMT077A	P	00	7.5	5.3	2.2	0.0	0.0	0.0	0.0	0.0	
TOTALS			3103.4	1302.7	1125.6	418.3	0.0	256.8	0.0	0.0	

CAREER TOTALS

FLYING TIME: ALL	2985.4	GRAND TOTAL:	3170.3
PRI/INST TIME: ALL	1639.9	MDS PRI/INST TIME:	1639.9

06 JUL 94 (10:17:32)

INDIVIDUAL TRAINING SUMMARY

EVENT MASK ****

NAME MCGEEHAN MARK C

TYPE-TNG A

ACFT H

CREW POS IPDX

EVENT	ID	DL	C	DD
CCTS ACADEM	A001	000000	000000	000000
QUAL CK	AA01	930903	950228	
SIM CHECK,	AA02	000000	000000	
QUAL/INST C	AA21	930903	950228	
INITIAL CER	G051	000000	000000	
FBP	G102	931029	951031	
CWD	G112	930909	950131	
CREW RES MG	G123	930930	000000	
CREW RES MG	G124	000000	000000	
INST/EVAL C	G125	000000	000000	
ACFT SVC	G209	000000	000000	
EVS/TAP	G221	000000	000000	
NUC SURETY	G300	930701	940731	
AWR-1	G301	930701	940731	
AWR-(CONV)	G302	930701	940731	
STRK MSN PR	G303	930701	940731	
AWR-4 (CONV	G304	000000	000000	
EWO STUDY	G310	930930	940131	
CCF	G312	930916	931031	
UMB	G330	930930	000000	
EPC	G340	930714	000000	
ORI	G350	000000	000000	
CPC	G360	000000	000000	
CTT-1	G511	000000	000000	
CTT-2	G512	930708	940930	
CTT-3	G513	930709	940930	
CTT-4	G514	000000	000000	
CTT-5	G515	000000	000000	
CTT-6	G516	000000	000000	
CTT-7	G517	000000	000000	
CTT-8	G518	000000	000000	
INITIAL CER	G51A	000000	000000	
COMM PROCED	G601	000000	000000	
AIRC	G604	000000	000000	
FLIP/ICAO	G607	000000	000000	
AIRPORT QUA	G640	000000	000000	
INT NUCLEAR	G900	000000	000000	
INT CONV WS	G910	000000	000000	
HYDRAULICS	G921	930616	940630	
FLT CONTROL	G922	930616	940630	
ENGINES	G923	930920	940930	
ELECTRICS	G924	930625	941231	
INSTRUMENTS	G925	000000	000000	
FUEL SYS	G926	930625	940630	
PNEUMATICS	G927	930920	940930	
IN/UN CHCE	G938	000000	000000	
ACDE INT WS	G970	000000	000000	
IND CONV WS	G990	000000	000000	
LOCAL SURVI	LS01	930723	940131	
CST	LS02	000000	000000	
WATER/EQUIP	LS03	931029	941031	
ACDE/HARNES	LS04	931217	941231	
ACDE/EGRESS	LS05	931217	941231	
LS EQUIPMEN	LS06	931029	941031	
EGRESS/EJEC	LS07	931029	940430	
HANGING HAP	LS09	931217	940430	

ALT-CHMBR R P11 921217
SIOP MSN CE 0012 930715
CONV MSN CE 0015 000000
FLT REC CHE R01 931025
CREW COMM O X601 000000
SMALL ARMS (X650 000000
FORMS CLASS X660 000000

PERSONAL DATA-PRIVACY ACT OF 1974

REPORT FOR AIRCRAFT ACCIDENT INVESTIGATION (PA) AS OF 94 JUN 24 RCN SA002-A02

AGE: 38
 JET: 1 HCC: CNG CPD: SAC WING: 0092 34
 GND: LIT SSAN: [REDACTED] API: 6 FAC: 3 ASC/DATE: 24/73 APR 07 CAFSC: NO1235C
 CFT TYPE = B052H SERIAL NUMBER = UNKNOWN ORGANIZATION: 0325 HS CPCS: 1P CUR RTG: SENIOR PILOT

*** ACCIDENT AIRCRAFT ***

	PRI	SEC	INST	EVAL	OTH	TOTAL TIME	PRI/INST	NGT	INS	SIM INS	SORT
B052H/1PDX	59.3	53.7	14.8	0.0	10.2	271.8	207.8	13.5	13.5	11.4	46
AS 30 DAYS:	0.0	0.0	0.0	0.0	1.3	9.9	9.9	0.0	0.0	0.0	1
A 180 DAYS:	1.4	1.3	2.9	0.0	1.3	17.3	12.3	0.0	0.0	2.7	3

*** OTHER ACTIVE AIRCRAFT ***

--NO MORE AIRCRAFT DATA--

*** CAREER TOTALS ***

DATES FF/LF	PRI	SEC	INST	EVAL	OTH	TOTAL TIME	PRI/INST	STUD	CHRT	CHRT SUBT	SORT
E00711/940617	1257.6	1089.2	362.3	0.0	256.3	2965.4	1639.9	124.9	0.0	0.0	466

12C: 64175

PAGE 3

PERSONAL DATA-PRIVACY ACT OF 1974

06 JUL 94 (10:22:46)		INDIVIDUAL TRAINING SUMMARY								EVENT MASK ****		
NAME HUSTON KENNETH S		TYPE-TNG C								ACFT H	CREW POS	IRDX
		C	C	C	C	C	C	C	C			
EVENT	ID	A1	A2	A3	A4	A5	A6	DL	DD			
HI/LOW BOMB	B001	00/00/00	05/01/20	940323	940522							
C-HGH ALT B	B002	00/00/00	05/00/04	940323	000000							
MED ALT CON	B003	00/00/00	00/00/01	931117	000000							
HI ALT SIOP	B008	00/00/00	00/00/02	930923	000000							
LO/ALT MINE	B026	00/00/00	00/00/01	931130	000000							
C-LW A CONV	B034	00/00/00	00/00/08	940111	000000							
S-LO SIOP B	B035	00/00/00	00/00/05	931020	000000							
HI ALT SIOP	B038	00/00/00	00/00/01	930720	000000							
4X SORTIE	BX04	00/00/00	00/01/02	940215	000000							
4X DUR TEN	BX05	00/00/00	00/00/00	000000	000000							
4X DUR ONE	BX06	00/00/00	00/06/08	940215	000000							
4X DUR TEN	BX07	00/00/00	00/08/04	940215	000000							
CTSS	BX10	00/00/00	02/01/04	940323	000000							
CTS DUR TEN	BX11	00/00/00	00/00/00	000000	000000							
CTS DUR ONE	BX12	00/00/00	12/05/04	940323	000000							
CTS DUR TEN	BX13	00/00/00	05/07/05	940310	000000							
S-AGM-86 HG	C013	00/00/00	00/00/06	931020	000000							
APP MON	I026	00/01/00	02/03/15	940517	940914							
L/A N/LEG D	N015	00/00/00	00/01/08	940215	940416							
SORTIE	P002	00/01/00	02/02/11	940517	000000							
CELL FORM	P022	00/00/00	01/01/07	940323	000000							
FORM BMB FR	T002	00/00/00	00/00/02	940111	000000							
CAMERA SCOR	VB51	00/00/00	00/00/03	931020	000000							
CONV CAM SC	VB52	00/00/00	00/00/03	940111	000000							
CAM SC BR 4	VB53	00/00/00	00/00/01	931020	000000							
CONV CM S B	VB54	00/00/00	05/00/02	940323	000000							
INSTR/EVAL	VP31	00/00/00	01/02/07	940310	000000							
EPTS	YD01	00/00/00	00/00/01	930923	000000							
LO CPTS	YD07	00/00/00	00/00/01	930907	000000							
MD/HI CPTS	YD08	00/00/00	00/00/01	931117	000000							

06 JUL 94 (10:20:41)

INDIVIDUAL TRAINING SUMMARY

EVENT MASK ****
CREW POS IRDX

NAME HUSTON KENNETH S

TYPE-TNG A

ACFT H

EVENT	ID	DL	DD
QUAL CK	AA01	921014	940331
CWD	G112	930625	940630
CREW RES MG	G123	911122	000000
CREW RES MG	G124	931202	941231
INST/EVAL C	G125	930929	000000
ACFT SVC	G209	940225	950228
NUC SURETY	G300	930805	940831
AWR-1	G301	940114	950131
AWR-(CONV)	G302	930923	940930
STRK MSN PR	G303	000000	000000
AWR-4 (CONV)	G304	000000	000000
EWO STUDY	G310	931118	940331
CCP	G312	940222	940331
UMB	G330	920521	000000
EPC	G340	000000	000000
ORI	G350	000000	000000
CPC	G360	000000	000000
CTT-1	G511	931203	941231
CTT-2	G512	930930	940930
CTT-3	G513	930903	940930
CTT-4	G514	921027	931231
CTT-5	G515	921027	931231
CTT-6	G516	930603	940630
CTT-7	G517	921029	931231
NIRC	G605	931115	000000
INT NUCLEAR	G900	000000	000000
OAS S & T W	G921	000000	000000
MISSILE MAL	G922	000000	000000
IN/UN CHCE	G938	000000	000000
LOCAL SURVI	LS01	940222	940831
CST	LS02	930101	940131
WATER/EQUIP	LS03	930908	940930
ACDE/HARNES	LS04	940121	950131
ACDE/EGRESS	LS05	940121	950131
LS EQUIPMEN	LS06	930908	940930
EGRESS/EJEC	LS07	931213	940630
HANGING HAR	LS09	940121	940731
PHYSICAL EX	PP01	930915	941130
ALT-CHMBR R	PP11	920507	950531
SIOP MSN CE	Q012	000000	000000
CONV MSN CE	Q015	000000	000000
FLT REC CHE	RR01	930909	941130
PC DOC	X312	000000	000000
SMALL ARMS	X650	000000	000000
FORMS CLASS	X660	000000	000000

PERSONAL DATA - PRIVACY ACT OF 1974

AS OF
DATE: 15 JUL 94

INDIVIDUAL FLIGHT DATA

MDS: *****
CREW-POS: *

NAME: HUSTON KENNETH S
AGE: 41
DAFSC: N01525C

RNK: LTC

LAST PHYSICAL: 930915
LAST ALT CHMB: 920507

RPI: 6
FAC: 3

SSAN:

ASC: 2A
MAJCOM: SAC

MDS	C	SEQ	TOTAL	PRIMARY	SECOND	INSTR	EVAL	OTHER	COMBAT	CMBT	SPT
B052D	E	00	6.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B052D	N	00	796.9	749.6	0.0	22.8	0.0	24.5	0.0	0.0	0.0
B052D	R	00	445.4	445.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B052G	N	00	25.8	7.3	0.0	0.0	0.0	18.5	0.0	0.0	0.0
B052G	R	00	763.8	618.1	0.0	54.5	91.2	0.0	0.0	0.0	0.0
B052H	N	00	18.0	18.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B052H	R	01	866.5	215.1	0.0	646.3	0.0	5.1	0.0	0.0	0.0
T037B	N	00	1.4	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0
T037B	R	00	6.1	0.0	0.0	0.0	0.0	6.1	0.0	0.0	0.0
T043A	N	00	340.8	175.7	0.0	165.1	0.0	0.0	0.0	0.0	0.0
KC135A	N	00	2.6	0.0	0.0	0.0	0.0	2.6	0.0	0.0	0.0
SB052H	N	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SB052H	R	02	11.2	0.0	0.0	11.2	0.0	0.0	0.0	0.0	0.0
SMW052H	R	00	19.5	4.3	0.0	14.9	0.0	0.3	0.0	0.0	0.0
TOTALS			3304.0	2239.5	0.0	914.8	91.2	58.5	0.0	0.0	0.0

CAREER TOTALS

FLYING TIME: ALL 3273.3
PRI/INST TIME: ALL 3123.9

GRAND TOTAL: 3378.1
MDS PRI/INST TIME: 3123.9

REPAIRED 94 JUN 24

PERSONAL DATA-PRIVACY ACT OF 1974

REPORT FOR AIRCRAFT ACCIDENT INVESTIGATION (PA) AS OF 94 JUN 24 PCN-SA002-A02

AME: HUSTON KENNETH S CND: SAC GRD: LTC SSAN: RPI: 6 FAC: 3 ASC/DATE: 2A/90 APR 12 DAFSC: NO1525C AGE: 41
JET: 1 MCC: CMB WING: 0092 BA ORGANIZATION: 0325 CS CPOS: IR CUR RTG: MASTER NAVIGATOR
CFT TYPE = 8052H SERIAL NUMBER = UNKNOWN

*** ACCIDENT AIRCRAFT ***

	PRI	SEC	INST	EVAL	OTM	TOTAL TIME	PFI/INST	NGT	INS	SIM INS	SORT
8052H/IRDX	213.1	0.0	646.3	0.0	5.1	864.5	861.4	91.6	0.0	0.0	144
AST 30 DAYS:	3.0	0.0	1.1	0.0	0.0	4.1	4.1	0.0	0.0	0.0	1
JET 30 DAYS:	3.0	0.0	1.1	0.0	0.0	4.1	4.1	0.0	0.0	0.0	1

*** OTHER ACTIVE AIRCRAFT ***

--NO MORE AIRCRAFT DATA--

*** CAREER TOTALS ***

DATES EFF/LF	PRI	SEC	INST	EVAL	OTM	TOTAL TIME	PFI/INST	STUD	CPRI	CMGT SUPR	SORT
850308/940617	1278.6	0.0	700.8	91.2	11.2	2081.8	1979.4	104.8	0.0	0.0	655

9A2C: 94175

END PAGE 5

PERSONAL DATA-PRIVACY ACT OF 1974

NAME: HUSTON KENNETH S WING: 0092 SSAN: [REDACTED] GRADE: LTC BOSCH API: 6 FACI: 3 BASE: FAIRCHILD AFB

INQUIRY

CAREER TOTALS
CAREER POSITION
PRIMARY TIME 930.6 N/B 6.0
SECONDARY TIME 187.9 700.8 0.0
EVALUATOR TIME 47.0 91.2 0.0
TOTAL TIME 1165.5 2081.6 6.0
TOTAL US MIL TIME 1165.5
TOTAL US CIVIL TIME 0.0
TOTAL SUPPLEMENTARY TIME 0.0
TOTAL SUPPORT SORT 833
TOTAL SUPPORT SORT 833
TOTAL FIRST FLOWN 83 JUN 99
TOTAL LAST FLOWN 83 JUN 99
TOTAL COMMAND FLT TIME 83 JUN 99

GRAND TOTAL 3378.1

NA6650- 94196

05 JUL 94 (10:11:36) INDIVIDUAL TRAINING SUMMARY EVENT MASK ****

NAME WOLFF ROBERT E TYPE-TNG C ACFT H CREW POS FFE

EVENT	ID	A1	A2	A3	A4	A5	A6	DL	DD
4X SORTIE	BX04	00/00/00	01/00/00	940309	0000000				
4X DUR TEN	BX05	00/00/00	00/00/00	0000000	0000000				
4X DUR ONE	BX06	00/00/00	01/00/00	940309	0000000				
4X DUR TEN	BX07	00/00/00	00/00/00	940309	0000000				
CTSS	BX10	00/00/00	00/02/00	940208	0000000				
CTS DUR TEN	BX11	00/00/00	00/00/00	0000000	0000000				
CTS DUR ONE	BX12	00/00/00	00/11/00	940208	0000000				
CTS DUR TEN	BX13	00/00/00	00/11/00	940208	0000000				
INSTRU APPR	I001	00/00/00	04/01/00	940309	940423				
NONPRE APPR	I009	00/00/00	01/00/00	940309	0000000				
MISSED APPR	I010	00/00/00	00/00/00	0000000	0000000				
PRED APPROA	I023	00/00/00	03/01/00	940309	0000000				
SORTIE	P002	00/00/00	01/02/00	940309	0000000				
TAKEOFF	P008	00/00/00	00/02/00	940208	940325				
LANDING	P013	00/00/00	06/02/00	940309	940423				
SIM ENG LOS	P015	00/00/00	00/00/00	0000000	0000000				
LANDING (NI	P016	00/00/00	00/00/00	0000000	0000000				
FLAP UP APP	P021	00/00/00	00/00/00	0000000	0000000				
VISUAL PATT	P036	00/00/00	04/01/00	940309	0000000				
SIM 6ENG AP	P063	00/00/00	00/00/00	0000000	0000000				
PILOT PRO	P070	00/00/00	00/00/00	0000000	0000000				
FLIGHT W/IN	V100	00/00/00	00/02/00	940208	0000000				

PERSONAL DATA - PRIVACY ACT OF 1974

AS OF
DATE: 15 JUL 94

INDIVIDUAL FLIGHT DATA

MDS: *****
CREW-POS: *

NAME: WOLFF ROBERT E
AGE: 46
DAFSC: 00061

RNK: COL
LAST PHYSICAL: 930701
LAST ALT CHMB: 930930

RPI: 6
FAC: 3

SSAN: [REDACTED]
ASC: 7A
MAJCOM: SAC

MDS	C	SEQ	TOTAL	PRIMARY	SECOND	INSTR	EVAL	OTHER	COMBAT	CMBT	SPT
B052C	P	00	69.1	27.6	41.0	0.0	0.0	0.5	13.8	0.0	0.0
B052D	P	00	1501.7	710.9	673.7	4.7	0.0	112.4	831.7	0.0	0.0
B052F	P	00	88.7	29.8	58.9	0.0	0.0	0.0	0.0	0.0	0.0
B052G	P	00	512.0	65.5	46.2	347.2	0.0	53.1	0.0	0.0	0.0
B052H	P	01	1036.8	435.9	395.1	155.8	9.6	40.4	0.0	0.0	0.0
T037B	P	00	0.8	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0
T041C	P	00	245.6	39.0	0.0	206.6	0.0	0.0	0.0	0.0	0.0
KC135A	P	00	0.9	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0
SB052G	P	00	18.0	1.5	4.5	12.0	0.0	0.0	0.0	0.0	0.0
SB052H	P	02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SMB052G	P	00	40.6	23.0	16.6	0.0	0.0	1.0	0.0	0.0	0.0
SMB077A	P	00	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SMT0400	P	00	4.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SMW052G	P	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTALS			3521.2	1340.2	1236.0	726.3	9.6	209.1	845.5	0.0	0.0

CAREER TOTALS

FLYING TIME: ALL 3455.6
PRI/INST TIME: ALL 2023.0

GRAND TOTAL: 3696.9
MDS PRI/INST TIME: 2023.0

PERSONAL DATA-PRIVACY ACT OF 1974

PREPARED: 94 JUN 24 REPORT FOR AIRCRAFT ACCIDENT INVESTIGATION (PA) AG-OF 94 JUN 24 PCN-84002-AG2
 NAME: WOLFF ROBERT E GRD: COL SSAN: [REDACTED] RPX: 6 FAC: 3 ASC/DATE: 7A/94 MAY 31 DAFSC: 00061 AGE: 46
 RJET: 1 MCC: CHB WING: 0092 BW ORGANIZATION: 0325 3S CPOS: FP CUR RTG: COMMAND PILOT
 ACFT TYPE = B052H SERIAL NUMBER = UNKNOWN

*** ACCIDENT AIRCRAFT ***

	PRI	SEC	INST	EVAL	OTH	TOTAL TIME	PRI/INST	NGT	INS	SIM INS	SORT
B052H/FPE	435.9	395.1	155.8	9.6	40.4	1036.8	591.7	1.3	3.8	3.6	152
LAST 30 DAYS:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
LAST 60 DAYS:	0.6	0.0	0.0	0.0	1.4	2.0	0.0	0.0	0.0	0.0	1
LAST 90 DAYS:	1.1	0.3	0.0	0.0	2.4	4.0	1.1	0.0	0.3	0.6	2

*** OTHER ACTIVE AIRCRAFT ***

--NO MORE AIRCRAFT DATA--

9-20

*** CAREER TOTALS ***

DATES FF/LF	PRI	SEC	INST	EVAL	OTH	TOTAL TIME	PRI/INST	STUD	CHGT	CHBT SUBT	SORT
710218/940509	1308.7	1214.9	714.3	9.6	208.1	3455.6	2023.0	241.3	845.5	0.0	671

NAQA20: 94175

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PERSONAL DATA-PRIVACY ACT OF 1974

PERSONAL DATA-PRIVACY ACT OF 1974

PREPARED 9A JUN 02 AS OF 94 JUN 02 PCN 84002-C01

TRAINING PERIOD ACTIVITY SUMMARY (PA)

CONTINUATION/INDIVIDUAL

NAME: WOLFF ROBERT E

SSAN: [REDACTED]

CREW POS: FPE ACFT: H TRNG LVL: E RJET: 1 MAJCOM: OS UNIT: 0325 FLIGHT:

PRORATED REQUIREMENT

MON QTR S/A

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

* * * ACCOMPLISHMENTS * * *

TRAINING LOST -

MON QTR S/A

REMAINING

LAST

ACCOMP

CURRENCY

DUE

P015 SIM ENG LOSS TO

(SIMULATOR)

1 1 931007 NO DATE

P016 LANDING (NIGHT)

2 2 931019 940216

P021 FLAP UP APPR

(SIMULATOR)

1 1 NO DATE

P036 VISUAL PATTERN

2 1 4 940309 NO DATE

P063 SIM 6ENG APP GO

1 1 931007 NO DATE

P070 PILOT PRO

931007 940405

V100 FLIGHT W/INST

(UNIT)

1 2 940208 NO DATE

*Y301 HIGH LOW 2/RUN

3 940304 940218

*Y101 INSTRU APPROACH

2 940104 940218

*Y809 TA/EVS NAV LEG

1 940304 940218

*Y111 EVS/VIS CON N/L

1 940104 940218

*YPO8 TAKEOFF

1 940104 940218

*Y113 LANDING

2 940104 940218

*Y197 TOUCH-GO LNDG

2 940304 940203

*Y101 AIR REFUEL D/M

1 940104 940218

NAQC00: 94153

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PERSONAL DATA-PRIVACY ACT OF 1974

SAC

PAGE 9

PERSONAL DATA-PRIVACY ACT OF 1974

PREPARED 9A JUN 02

TRAINING PERIOD ACTIVITY SUMMARY (PA) AS OF 96 JUN 02 PEN 54002-C01

PCS

NAME: WOLFF ROBERT E

SSAN: [REDACTED]

CREW POS: FPE

PROMOTED

REQUIREMENT

EVENT DESCRIPTION

MON QTR S/A

ACCOMPLISHMENTS

JAN FEB MAR APR MAY JUN

TOT - TRAINING LOST

MON QTR S/A

REMAINING

1

MON QTR S/A

1

MON QTR S/A

1

MON QTR S/A

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MON QTR S/A

1

MON QTR S/A

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NAQ100: 94151

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PERSONAL DATA-PRIVACY ACT OF 1974

SAC

PLGE

B

INDIVIDUAL CURRENCY SUMMARY (PA) AS OF 94 JUN 22 PCN SAC02-AR1

50
51
52

ACFT
CPCE
S

***** CS*****	TYPE TRAINING	RDTS	END 00	WYYS/IS	FLT	*TYPE	REQUEST*

TRAINING TABLES ASSIGNED: AUG 66
TABLE REFERENCE MONTH:

Tuesday

[illegible][illegible][illegible]

AIRC.	EQUIP/HAN	NO DATE	P.	ONE TIME	DATE
44		NO DATE	P.	PASSED	
45		NO DATE	P.	PASSED	
46		NO DATE	P.	PASSED	
47		NO DATE	P.	PASSED	
48		NO DATE	P.	PASSED	
49		NO DATE	P.	PASSED	
50		NO DATE	P.	PASSED	
51		NO DATE	P.	PASSED	
52		NO DATE	P.	PASSED	
53		NO DATE	P.	PASSED	
54		NO DATE	P.	PASSED	
55		NO DATE	P.	PASSED	
56		NO DATE	P.	PASSED	
57		NO DATE	P.	PASSED	
58		NO DATE	P.	PASSED	
59		NO DATE	P.	PASSED	
60		NO DATE	P.	PASSED	
61		NO DATE	P.	PASSED	
62		NO DATE	P.	PASSED	
63		NO DATE	P.	PASSED	
64		NO DATE	P.	PASSED	
65		NO DATE	P.	PASSED	
66		NO DATE	P.	PASSED	
67		NO DATE	P.	PASSED	
68		NO DATE	P.	PASSED	
69		NO DATE	P.	PASSED	
70		NO DATE	P.	PASSED	
71		NO DATE	P.	PASSED	
72		NO DATE	P.	PASSED	
73		NO DATE	P.	PASSED	
74		NO DATE	P.	PASSED	
75		NO DATE	P.	PASSED	
76		NO DATE	P.	PASSED	
77		NO DATE	P.	PASSED	
78		NO DATE	P.	PASSED	
79		NO DATE	P.	PASSED	
80		NO DATE	P.	PASSED	
81		NO DATE	P.	PASSED	
82		NO DATE	P.	PASSED	
83		NO DATE	P.	PASSED	
84		NO DATE	P.	PASSED	
85		NO DATE	P.	PASSED	
86		NO DATE	P.	PASSED	
87		NO DATE	P.	PASSED	
88		NO DATE	P.	PASSED	
89		NO DATE	P.	PASSED	
90		NO DATE	P.	PASSED	
91		NO DATE	P.	PASSED	
92		NO DATE	P.	PASSED	
93		NO DATE	P.	PASSED	
94		NO DATE	P.	PASSED	
95		NO DATE	P.	PASSED	
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JUL 93
SEP 93
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FEB 94
MAY 94
AUG 94

1	INT_REFRESHING	30 JUN 93	L	LOCKED	30 SEP 93	L2
2	FLY_REC_CHECK	15 JUL 93	L	LOCKED	31 AUG 93	T

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FLIGHT TIME HISTORY
L HOURS: 3455.5
FLAG MEANING: * IN PHASE, ** DUE WITHIN A MONTH, *** OVERDUE, ### NO DATE LAST ACCOMP

	SCHEDULED ACTIVITIES	SCHEDULED ACTIVITIES
30/180:	4.0/190:	7.7
CURRENT AIRCRAFT		

	START DT/TH	DESCRIPTION	START DT/TH	TERMIN DT/TH	DESCRIPTION	START DT/TH	TERMIN DT/TH
1036-0	09 MAY 94	C LLS PLCCM					
FPE	-C NO DATE						
1037H							
FPE							

1

[illegible]

	PAGE	SAC	PAGE
CG: 24153	4		

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PREPARED: 96 JUL 15

PERSONAL DATA-PRIVACY ACT OF 1974
FLYING HISTORY REPORT (PA)

AS OF: 94 JUL 15

FCN 5A002-605

INQUIRY

NAME: VOLFE, ROBERT E
RJET: 1 CND: SAC WING: 0092

SSAN: [REDACTED]
PRI CAN POS: P

GRADE: COL BOSCH

FACT: 3 UNIT: 0325

QEDAS: N/A/CHILB ASG/DATE: 7A/94 MAY 31
BASE: FAIRCHILD AFB

CAREER TOTALS

CREW POSITION	TIME
PRIMARY TIME	1308:07
SECONDARY TIME	1214:39
INSTRUCTOR TIME	714:33
EVALUATOR TIME	208:16
OTHER TIME	321:3
TOTAL TIME	321:3
STUDENT TIME	00:00
FOREIGN MIL TIME	00:00
CIVILIAN TIME	843:00
COMBAT TIME	071:00
TOTAL SORTIES	156
COMBAT SORTIES	156
COMBAT SUPPORT SORT	0
DATE FIRST FLOWN	31 FEB 78
DATE LAST FLOWN	94 MAY 09
COMMAND PLT TIME	0:00
GRAND TOTAL	3696:9

MA6510: 94196


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PERSONAL DATA-PRIVACY ACT OF 1974

USAF AIRCRAFT ACCIDENT INVESTIGATION REPORT INDEX TAB FORM

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D AF FORM 711c - AIRCRAFT MAINTENANCE AND MATERIAL REPORT
G FLIGHT AND PERSONNEL RECORDS
H AFTO FORMS 781
I MATERIAL DEFICIENCY REPORTS
J TECHNICAL AND ENGINEERING EVALUATIONS OF MATERIAL (DOD)
K DD FORM 175, MILITARY FLIGHT PLAN
L DD FORM 365F, WEIGHT AND BALANCE CLEARANCE FORM F - TACTICAL
M CERTIFICATE OF DAMAGE
N TRANSCRIPTS OF RECORDED COMMUNICATIONS
O ANY ADDITIONAL SUBSTANTIATING DATA REPORTS
Q ORDERS APPOINTING INVESTIGATING BOARD
R DIAGRAMS (FALLOUT-IMPACT AREA)
S PHOTOGRAPHS
T INDIVIDUAL FLIGHT RECORDS
V TESTIMONY AND STATEMENTS OF WITNESSES
W WEATHER OBSERVATIONS
X STATEMENTS OF INJURY OR DEATH
Y DOCUMENTS APPOINTING ACCIDENT INVESTIGATION BOARD
Z PHOTOGRAPHS NOT INCLUDED IN PART I OF SAFETY REPORT
AA SUPPORTING ADDITIONAL DATA

H

ISSUING AGENCY		I certify that the life support equipment listed on this form is prepositioned on this aircraft on the date indicated	
DATE	GRADE	NAME	SIGNATURE
27 May 94	Sgt.	LUIS M. PINERO	
CERTIFICATION (To be completed by aircraft commander or designated representative prior to departure.) I certify that the items listed on this form are on board and in apparent serviceable condition on the date indicated by my signature.			
NAME AND DATE	NAME AND DATE	NAME AND DATE	NAME AND DATE
MMSC 6-17-94			
REMARKS 325 BS/POOL, AIRCREW LIFE SUPPORT FAIRCHILD AFB, WA 99011-5000 DSN: 657-2487 or 657-2214			

B-52 AIRCRAFT REFUELING AND DISTRIBUTION LOG

AIRCRAFT SERIAL NUMBER 1026 DATE OF REFUEL/DEFUEL 23/06/4 NAME OF REFUELING SUPERVISOR SGT. W. B. RECHT PIT/TRUCK NUMBER 36

BLOCK I

FORWARD BODY		
1	8	
2	8	
3		

LEFT OUTBOARD	NO. 1 MAIN	NO. 2 MAIN	CENTER WING
1 7800	1 9700	1 21900	1 8
2 7000	2 9700	2 21,900	2 D
3 7400 F	3	3	3

MID BODY		
1	8	
2	8	
3		
AFT BODY		
1	3000	
2	3000	
3	3125	

BLOCK II

POL SOURCE FLOWMETER READING	
GALLONS AFTER REFUELING	3232
GALLONS BEFORE REFUELING	0
DIFFERENCE	3232
MULTIPLY BY FUEL DENSITY	6.4
POUNDS FUEL DELIVERED	-20,685
AIRCRAFT TOTALIZER READING BEFORE SERVICE	129,200
TOTAL POUNDS IN TANKS	89,685
TOTALIZER READING AFTER SERVICE	89,500
DIFFERENCE	185

RIGHT DROP	
1	4500
2	4400
3	4500

INSTRUCTIONS

1. This form shall be properly filled in and verified as accurate by the fuel servicing crew for each refueling - defueling and when adjusting fuel in partially filled tanks.
2. Keep with AFTO Form 781 until Aircraft Commander signs.
3. After Aircraft Commander signs, this form will be retained on file for 72 hours after date of flight.
4. Maximum allowable difference between totalizer reading (after refueling) and totalizer reading before refueling plus fuel delivered will not exceed 3% for B-F and 4% for G and H.
5. G/H models after T.O. 1B-52-2305 only outboard wings, aft body and external tanks are required for fuel load distribution by dipstick. All other tanks are optional.

LEGEND

1 - SCHEDULED FUEL LOAD 2 - GAGE READING AFTER REFUELING 3 - DIPSTICK / VISUALLY CHECKED POUNDS ON BOARD

SIGNATURE OF REFUELING / DEFUELING SUPERVISOR (Verified)	DATE	SIGNATURE OF LAUNCH CREW SUPERVISOR (Verified)	DATE	SIGNATURE OF AIRCRAFT COMMANDER (Approved)	DATE
SGT. W. B. RECHT	23/06/4	SGT. W. B. RECHT	23/06/4		

AFTO FORM 6, AUG 91

PREVIOUS EDITION WILL BE USED

AFTO FORM 781 SERIES

The AFTO FORM 781 Series binder was not on board the aircraft and all entries were made available. Copies of the B-52 Aircraft Refueling and Distribution Log (AFTO FORM 6) and the Prepositioned Life Support Equipment form (AFTO FORM 46) are included.

Richard A. Lane

RICHARD A. LANE, Maj, USAF
Maintenance Member

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X STATEMENTS OF INJURY OR DEATH
Y DOCUMENTS APPOINTING ACCIDENT INVESTIGATION BOARD
Z PHOTOGRAPHS NOT INCLUDED IN PART I OF SAFETY REPORT
AA SUPPORTING ADDITIONAL DATA

I

PRODUCT QUALITY DEFICIENCY REPORT

No product quality deficiency reports were submitted during the course of this investigation.

Richard A. Lane
RICHARD A. LANE, Maj, USAF
Maintenance Member

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J

Tab J Index

1. Flight Instrument Analysis Report
2. Flight Control " " "
2. Power Plant Analysis Report

INSTRUMENT REPORT

MISHAP AIRCRAFT: B-52H, SERIAL NUMBER 61-026

MISHAP DATE: 24 JUNE 1994

OC-ALC INVESTIGATOR: Mr. Robert C. Murray

I. Introduction:

The following are the results of the analysis conducted on the instruments recovered from B-52H, S/N 61-026 Class "A" Flight Mishap. This mishap occurred at Fairchild AFB, WA on 24 Jun 94. All instruments had sustained impact and fire damage. Some had sustained damage to the extent that no readings could be obtained. Most instruments had sustained extensive post-impact fire damage which would have destroyed any pointer impact marks that may have existed. Instrument reactions to impact forces and heat vary depending upon the particular design. Where applicable, the peculiarities are discussed under the individual subheadings. Where more than one like item was installed on the aircraft and system application on crew position could not be determined, the components have been labeled alphabetically for documentation purposes.

II. Evaluation:

A. Flight and Navigation Instruments.

1. Attitude Director Indicator (ADI). Only one ADI from an undetermined crew position was recovered. The entire front section including the roll gimbal and attitude sphere were missing. No reading was obtained.

2. Standby Attitude Indicator. This indicator incorporates a self-contained gyro that can operate for several minutes after loss of electrical power due to gyro inertia. This indicator's front glass, pitch trim and caging knob, and attitude sphere were missing. The OFF flag was in view. The roll gimbal was captured by impact in a position that correlated to approximately 95 degrees left bank. No pitch reading was obtained.

3. Horizontal Situation Indicator (HSI). The HSI employs a high-ratio gear mechanism to position the numerous presentations, and it will retain most presentations existing upon loss of electrical power. The heading marker and course presentations can change slightly if the set knobs are struck during the impact sequence. Only one HSI from undetermined crew position was recovered. This indicator's dial glass, bezel, heading set knob, and course set knob were missing. The following readings were obtained:

Compass Card	337 degrees
Heading Marker	230 degrees
Bearing Pointer	315 degrees
Course Arrow	228 degrees
Course Window	228 degrees
Range Indicator	2 miles (Warning Flag in View)

4. Indicated Airspeed Indicator. The design on this indicator is such that pressures operate a bellows assembly to position the pointer and drum. The presentation will return to zero upon loss of input. Unless immediate capture occurs, the presentation can change as the result of impact forces.

a. Pilot's Indicated Airspeed Indicator. This indicator's dial glass and pointer were missing. The maximum allowable airspeed pointer was at 457 knots. The maximum allowable mach index was at .825 mach. Internal examination revealed impact marks on the vernier drum that correlated to a drum presentation at 62 knots. Examination at the dial face did not reveal any pointer impact marks. No conclusive reading was obtained.

b. Co-pilot's Indicated Airspeed Indicator. This indicator's dial glass was intact. The maximum allowable airspeed pointer was at 380 knots. The maximum allowable mach index was at .84 mach. As recovered, the indicator was depicting approximately 430 knots but was not captured. Dial face and internal examination did not reveal any impact marks. No reading was obtained.

5. True Airspeed Indicator. The design of this indicator is such that it will retain the indication existing upon loss of electrical power. Only one indicator from an undetermined crew position was recovered. This indicator's dial glass and bezel were missing. The sub-dial was captured by impact at approximately 150 knots. The pointer was at 80 knots but was not captured. It is concluded that this indicator was reading approximately 150 knots at the time of impact.

6. Altimeter. The design of the altimeter is such that unless immediate capture of the drum readout occurs, the presentation can change as the result of impact forces. Only one altimeter from an undetermined crew position was recovered. This indicator's reset lever was missing. The barometric pressure set knob was bent. The dial glass was cracked. The STBY flag was in view. The barometric pressure setting was 30.18. This setting could have changed slightly when the set knob was struck during the impact sequence. Internal examination revealed that the altitude drums were indicating approximately 2,300 feet but were not captured. No conclusive altitude reading was obtained.

7. Radar Altimeter. The design of this indicator is such that the pointer will return to a power-off position (below zero feet) upon loss of electrical power.

a. Indicator "A". This indicator's bezel, dial glass, low altitude limit index cursor, and control knob were missing. The OFF flag was in view. The pointer was captured in a position that correlated to approximately 25 feet.

b. Indicator "B". This indicator's bezel, dial glass, low altitude limit index cursor, and control knob were missing. The pointer was indicating off-scale at the power-off position.

8. Vertical Velocity Indicator (VVI). Parts from both VVI's were recovered; however, the parts recovered were insufficient for analysis.

9. Standby Compass. The compass was recovered intact and appeared to be functional. No reading was obtained.

B. Engine Instruments.

1. Tachometer Indicator. The design of this indicator is such that it will drive to the low end (zero RPM) stop upon loss of electrical signal unless capture occurs almost simultaneously with loss of signal. Since the exact instance of capture is unknown, all readings should be considered a minimum. Seven of the eight tachometers were recovered.

a. No. 1 Engine. This indicator's dial glass and main pointer were missing. Internal examination revealed that the gear mechanism was captured in a position that correlated to 100 percent RPM.

b. No. 2 Engine. This indicator's dial glass was missing. The main pointer was indicating 78 percent RPM but was loose on the shaft. Internal examination revealed that the gear mechanism was captured in a position that correlated to 70 percent RPM.

c. No. 3 Engine. This indicator's dial glass was missing. The markings on the dial face were destroyed by heat. Internal examination revealed that the gear mechanism was intact, free to rotate, and was at the low end stop.

d. No. 4 Engine. This indicator's dial glass was broken. The markings on the dial face were destroyed by heat. The main pointer was in a position that correlated to a reading in excess of 106.7 percent RPM. Internal examination revealed that the gear mechanism was captured in a position that verified this reading.

e. No. 5 Engine. This indicator's dial glass and main pointer were missing. The markings on the dial face were destroyed by heat. Internal examination revealed that the gear mechanism was captured in a position the correlated to 28 percent RPM.

f. Indicator "A" (No. 6 or No. 7 Engine). This indicator's dial glass and tip of the main pointer were missing. The remainder of the main pointer was in a position that correlated to approximately 95 percent RPM. Internal examination revealed that the gear mechanism was captured in a position that correlated to approximately 105 percent RPM.

g. No. 8 Engine. This indicator's dial glass was missing. The main pointer was indicating 4 percent RPM. Internal examinations revealed that the gear mechanism was captured in a position that correlated to approximately 105 percent RPM.

2. Fuel Flow Indicator. The fuel flow indicator does not employ a gear train, and the pointer position can change as the result of impact forces. The indicators had sustained major impact damage, and the following readings are considered to be inconclusive.

a. No. 2 Engine. This indicator's glass was missing. The markings on the dial face were destroyed by heat. The pointer was captured in a position that correlated to 13,000 pounds per hour (PPH).

b. No. 3 Engine. This indicator's dial glass was missing. The markings on the dial face were destroyed by heat. The pointer was captured in a position that correlated to 2,900 PPH.

c. No. 5 Engine. This indicator's dial glass was missing. The markings on the dial face were destroyed by heat. The pointer was captured in a position that correlated to approximately 1,100 PPH.

d. No. 6 Engine. This indicator's dial glass was missing. The markings on the dial face were destroyed by heat. The pointer was captured in a position that correlated to 13,300 PPH.

e. Indicator "A". This indicator was damaged to the extent that no reading could be obtained.

f. Indicator "B". This indicator's dial glass was missing. The pointer was captured at an indication of approximately 1,330 PPH.

g. Indicator "C". This indicator was damaged to the extent that no reading could be obtained.

h. Indicator "D". This indicator was damaged to the extent that no reading could be obtained.

3. Total Fuel Flow Indicator. This indicator was damaged to the extent that no reading could be obtained.

4. Exhaust Gas Temperature (EGT) Indicator. The design of this indicator is such that the pointers are free to oscillate upon loss of electrical signal. The following readings are considered to be inconclusive.

a. Indicator "A" (No. 1 or No. 7 Engine). This indicator's dial glass, case, and rear section were missing. The pointer and pointer positioning mechanism were in positions that correlated to 240 degrees C but were not captured.

b. Indicator "B" (No. 1 or No. 7 Engine). This indicator's dial glass, pointer, and case were missing. The pointer positioning mechanism was in a position that correlated to approximately 700 degrees C but was not captured.

c. No. 2 Engine. This indicator's dial glass and rear of the case were missing. The markings on the dial face were destroyed by heat. The pointer and pointer positioning mechanism were captured in positions that correlated to approximately 280 degrees C.

d. No. 3 Engine. This indicator's dial glass was missing. The markings on the dial face were destroyed by heat. The pointer was free to move. The pointer positioning was in a position that correlated to 500 degrees C but was not captured.

e. No. 4 Engine. This indicator's dial glass was missing. The markings on the dial face were destroyed by heat. The pointer was free to move. The pointer positioning was in a position that correlated to zero degrees C but was not captured.

f. No. 5 Engine. This indicator's dial glass was missing. Most markings on the dial face were destroyed by heat. The pointer was captured at an indication of 320 degrees C. The pointer positioning mechanism was in a position that correlated to 320 degrees C but was not captured.

g. No. 6 Engine. This indicator's dial glass was shattered. The pointer was indicating zero degrees C but was free to move. The pointer positioning mechanism was in a position that correlated to zero degrees C but was not captured.

h. No. 8 Engine. This indicator's dial glass and pointer were missing. The pointer positioning mechanism was in a position that correlated to approximately 200 degrees C but was not captured.

5. Engine Pressure Ratio (EPR) Indicator. The EPR indicator employs a minor gear train to position the pointers; however, the presentation can change as the result of impact forces. The indicators had sustained major impact damage, and the following readings are considered to be inconclusive.

a. No. 1 Engine. This indicator was damaged to the extent that no reading could be obtained.

b. No. 2 Engine. This indicator's dial glass was shattered. The pointer was captured below 1.2 EPR.

c. No. 3 Engine. This indicator's dial glass and internal mechanism were missing. The pointer was captured below 1.2 EPR.

d. No. 4 Engine. This indicator's dial glass and internal mechanism were missing. The pointer was captured at approximately 2.2 EPR.

e. No. 5 Engine. This indicator's dial glass and part of the internal mechanism were missing. The pointer was captured at 2.9 EPR.

f. No. 6 Engine. This indicator's dial glass and internal mechanism were missing. The pointer was captured at 1.75 EPR.

g. No. 7 Engine. This indicator was damaged to the extent that no reading could be obtained.

h. No. 8 Engine. This indicator was damaged to the extent that no reading could be obtained.

6. Oil Pressure Indicator. The design of this indicator is such that the pointer position can change as the result of impact forces. The following readings are considered to be inconclusive.

a. No. 1 Engine. This indicator's dial glass was missing. The pointer was indicating 40 pounds per square inch (PSI) but was free to move. The pointer positioning mechanism was in a position that correlated to approximately 80 PSI but was not captured.

b. No. 2 Engine. This indicator's dial glass was missing. The pointer and pointer positioning mechanism were free to move. No reading was obtained.

c. No. 3 Engine. This indicator's dial glass was missing. The pointer and pointer positioning mechanism were free to move. No reading was obtained.

d. No. 4 Engine. This indicator's dial glass was shattered. The pointer was indicating 10 PSI but was free to move. The pointer positioning mechanism was in a position that correlated to approximately 65 PSI but was not captured.

e. No. 5 Engine. This indicator's dial glass was shattered. The pointer and pointer positioning mechanism were in positions that correlated to approximately 65 PSI but were not captured.

f. No. 6 Engine. This indicator was damaged to the extent that no reading could be obtained.

g. No. 7 Engine. This indicator's dial glass was missing. The pointer and pointer positioning mechanism were in positions that correlated to approximately 25 PSI but were not captured.

h. No. 8 Engine. This indicator's dial glass was missing. The pointer and pointer positioning mechanism were in positions that correlated to approximately 75 PSI but were not captured.

7. Oil Temperature Indicator. The design of this indicator is such that it will retain the indication existing upon loss of electrical power. This indicator's dial glass, dial face, and pointer were missing. Internal examination revealed that the gear mechanism was in a position that correlated to a reading of 100-120 degrees C. The oil temperature selector switch was destroyed.

C. Miscellaneous Instruments.

1. Fuel Quantity Indicator. The design of this indicator employs a major gear train to position the pointer and internal potentiometer. This design will retain the indication existing upon loss of electrical power.

- a. Left External. This indicator's dial glass, dial face, and pointer were missing. Internal examination revealed that the gear mechanism was in a position the correlated to approximately 4,500 pounds.
 - b. Right External. This indicator's dial glass, dial face, and pointer were missing. Internal examination revealed that the gear mechanism was in a position that correlated to approximately 4,000 pounds.
 - c. Left Outboard. This indicator's dial glass, dial face, and pointer were missing. Internal examination revealed that the gear mechanism was in a position that correlated to approximately 7,000 pounds.
 - d. Right Outboard. This indicator's dial glass, dial face, and pointer were missing. Internal examination revealed that the gear mechanism was in a position that correlated to approximately 7,000 pounds.
 - e. No. 1 Main. Only the front section of this indicator containing the gears was recovered. Internal examination revealed that the gear mechanism was in a position that correlated to approximately 8,000 pounds.
 - f. No. 4 Main. This indicator's dial glass, dial face, and pointer were missing. Internal examination revealed that the gear mechanism was at the low end (zero pounds) stop.
 - g. No. 2 Main. This indicator's dial glass was missing. The pointer was melted to the dial face at approximately 19,000 pounds. Internal examination revealed that the gear mechanism was in a position that verified this reading.
 - h. No. 3 Main. This indicator's dial glass, dial face, and pointer were missing. Internal examination revealed that the gear mechanism was in a position that correlated to approximately 13,000 pounds.
 - i. Center Wing. This indicator's dial glass, dial face, and pointer were missing. Internal examination revealed that the gear mechanism was in a position that correlated to approximately 4,000 pounds.
 - j. Forward Body. This indicator's dial glass, dial face, and pointer were missing. Internal examination revealed that the gear mechanism was in a position that correlated to approximately 1,000 pounds.
 - k. Mid Body. This indicator's dial glass, dial face, and pointer were missing. Internal examination revealed that the gear mechanism was in a position that correlated to approximately 4,000 pounds.
 - l. Aft Body. This indicator's dial glass, dial face, and pointer were missing. Internal examination revealed that the gear mechanism was in a position that correlated to approximately 2,000 pounds.
2. Total Fuel Quantity Indicator. The design of this indicator is similar to the other fuel quantity indicators, and it will retain the indication existing upon loss of electrical power. This indicator's dial glass, dial face, and pointers were missing. Internal examination revealed that the gear mechanism was in a position that correlated to 73,920 pounds.
3. Hydraulic Pressure Indicator. Only two indicators were recovered. Both indicators were damaged to the extent that no readings could be obtained.
4. Flap Position Indicator. This indicator was damaged to the extent that no reading could be obtained.

5. Lateral Trim Indicator. This indicator was damaged to the extent that no reading could be obtained.

6. Outside Air Temperature Indicator. The design of this indicator is such that the pointer is easily displaced by impact forces. This indicator's dial glass was missing. The pointer and pointer positioning mechanism were captured in positions that correlated to approximately +10 degrees C.

7. CG Display Unit. This indicator employs a digital display. No reading was obtained.

8. Clock. Only the co-pilot's clock was recovered. The indicated time was 12:53:49. The elapsed time indicator was at 59 minutes.

9. Crosswind Crab Indicator. This indicator was damaged to the extent that no reading could be obtained.

10. Cabin Pressure Indicator. The design of this indicator is such that the pointer will return to zero upon loss of input pressure. This indicator's dial glass was intact. The pointer was indicating 49,000 feet but was not captured. Examination of the dial face did not reveal any pointer impact marks. No reading was obtained.

11. Manifold Temperature Indicator. The design of this indicator is such that the pointer is easily displaced by impact forces. This indicator's dial glass was shattered. The pointer and pointer positioning mechanism were free to move. No reading was obtained.

12. Accelerometer "G" Meter. The design of the "G" meter is such that it will record the vertical "G's" experienced during the impact sequence until the instrument reaches its design limits, is captured, or the mass connecting mechanism breaks. It most likely does not represent the "G's" experienced prior to impact. This indicator's dial glass was shattered. The pointers were missing. Examination of the dial face did not reveal any pointer impact marks. Internal examination revealed that the mechanism was in a position that correlated to the following readings:

Positive Pointer	+4G
Negative Pointer	-2G
Carrier Pointer	+1G

13. Liquid Oxygen (LOX) Quantity Indicator. The design of this indicator is such that it will retain the indication existing upon loss of electrical power. This indicator's dial glass, dial face, pointer, and OFF flag were missing. Internal examination revealed that the gear mechanism was in a position that correlated to approximately 65 liters.

14. Ammeter. The design of the ammeter is such that the pointer is easily displaced by impact forces. Only two ammeters were recovered. System application could not be determined.

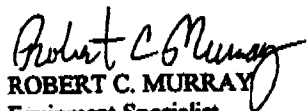
a. Indicator "A". This indicator's dial glass was missing. The pointer and pointer positioning mechanism were captured at the low end of the scale (below zero amps).

b. Indicator "B". This indicator's dial glass was missing. The pointer was indicating 50 amps; however, the pointer and pointer positioning mechanism were free to move. No reading was obtained.

15. Frequency Meter. The design of this indicator is similar to the ammeter. Most of this indicator's dial glass was missing. The pointer and pointer positioning mechanism were captured in positions that correlated to 385 cycles.

III. Determination:

Nothing was noted during this analysis that indicated instrument or instrument system failure prior to impact or loss of input signal.



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FLIGHT CONTROLS REPORT

MISHAP AIRCRAFT: B-52, SERIAL NUMBER 61-0026

MISHAP DATE: 24 JUNE 1994

I. Introduction

As a result of the crash of B-52H S/N 61-0026 at Fairchild AFB, WA on June 24, 1994, the undersigned was tasked by OC-ALC to serve as a technical advisor to the Mishap Investigation Board. Travel to Fairchild, AFB was on June 28, 1994.

II. Background

B-52H 61-0026 from Fairchild AFB, WA impacted Fairchild Field on June 24, 1994. Impact was approximately 3000 ft. southeast of the midpoint of the runway. The mishap occurred during execution of a 60° bank, low altitude, 360° turn around the tower. Due to the low airspeed and moderate angle of impact, the wreckage was contained in a relatively compact area. Flight control components in the cockpit were completely destroyed from the impact and subsequent breakup. Other pertinent flight control components were found and evaluated.

III. Evaluation

A. VERTICAL STABILIZER - The vertical stabilizer was found still connected to the empennage and came to rest in the horizontal position. The vertical stabilizer had severe fire damage and impact damage to the upper and leading edges. No evidence was found to indicate any malfunction.

B. RUDDER CONTROL SYSTEM - The rudder structure was basically intact and operable, though bent and damaged from impact. The skin showed extensive evidence of fire and impact damage. The rudder control system was complete showing only impact damage. Measurements taken from the rudder trim actuator indicate the rudder was trimmed 0.6° airplane nose right. This is not considered to be conclusive evidence since the cable system was severely disturbed by the separation of the tail section. The fuselage directly below the rudder shows evidence of two impacts. Measurements taken from these impact marks indicate that the rudder hit at 0.5° and 4.4° nose right. Analysis of the soot marks show the 0.5° mark occurred before any fire and is therefore a result of aircraft initial impact. There is no evidence of any rudder system malfunction. Video reviews also verify the rudder system was functional before impact.

C. HORIZONTAL STABILIZER TRIM SYSTEM - The stabilizer trim mechanism was intact in the empennage portion of the wreckage. Measurements of the traveling nut position and the jackscrew show that the trim was set at 1.9° stabilizer nose up (aircraft nose down). Cockpit control position could not be determined due to extensive damage to the cockpit. The aisle stand and all control quadrants were extensively damaged by impact and fire. Stabilizer control mechanism was in an appropriate setting with no indication of a runaway condition.

D. ELEVATOR CONTROL SYSTEM - The major portion of the right elevator was attached to the stabilizer, which came to rest in the vertical position still attached to the empennage. The right elevator was structurally intact with evidence of fire and impact damage. The left elevator was still attached to the left stabilizer which came to rest beyond the empennage section. The elevator had impact damage to the inboard edge and minor soot. Impact damage from the elevator indicate right impact damage occurred with 2.8° nose down elevator. Damage from the left elevator indicate impact at 1.4° nose up. This information is questionable value, the elevators are interconnected and raise and lower simultaneously. Blast forces and tumbling would affect these positions and it is evident that the elevators were moving during the crash sequence. Both elevators still have free movement. No evidence was found to indicate elevator malfunction.

E. SPOILER AND AIRBRAKE CONTROL SYSTEM - All fourteen spoilers and actuators were found scattered throughout the wreckage site. Spoilers five, six and seven were still attached to a upside down left wing section in a fully retracted position. Due to the lack of impact damage expected if the spoilers had been extended, these spoilers were probably retracted prior to impact and during subsequent tumbling. The remaining spoilers were detached and scattered with the left wing spoilers generally located in one area and the right wing spoilers generally located at the far end of the site.

Actuators No. 1 and 3 were attached to their respective spoiler with zero extension indicating full retraction.

Number 2 actuator was found completely detached with the end fitting broken off and had 3 3/8 inch ram extension. This extension indicates a 33° deployment.

Number 4 actuator was found completely detached with the ram completely pulled out. No determination could be made as to the spoiler position.

Actuators 5, 6, and 7 were found intact in a left wing section with their respective spoilers and zero extension.

Actuator No. 8 was found attached to a right hand wing section. This actuator had the end fitting broken off with 6 3/8 inch ram extension. The ram was also bent approximately 10° and dented. This translates to 18 3/4 inch total extension. The measured extension indicates a 59° deployment.

Actuator No. 9 was found attached to a right hand wing section. This actuator had the end fitting broken off with 5 5/8 inch ram extension. This translates to 18 inch total extension. This extension indicates a 52° deployment.

Number 10 actuator was found completely detached with the end fitting broken off and had 2 5/8 inch (27° deployment) ram extension. The extended actuator was slightly bent.

Number 11 actuator was found completely detached with the end fitting broken off and a zero ram extension. A zero extension equals no spoiler deployment.

Actuator No. 12 was found attached to a right hand wing section. This actuator had the end fitting broken off with 4 7/8 inch ram extension and was slightly bent. This translates to 17 1/4 inch total extension. This extension indicates a 46° deployment.

Actuator No. 13 was found under a right hand wing section. The end fitting was broken off with the ram extended 1.43 inches. The ram could not be moved either in or out. Total extension would be 13.8 extension. This extension indicates a 15° deployment.

Actuator No. 14 was attached to spoiler no. 14 with 19 1/8 inch total extension. This extension indicates a 60° deployment.

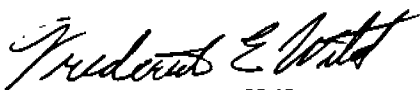
Evidence indicates that the left side spoilers were fully retracted since the majority of the hydraulic rams were found in the fully retracted position. The majority of the right side actuators were found with the rams extended and three were bent, indicating deployment of these spoilers at impact. No conclusive determination can be made based on these results alone since the actuators can change position due to the breakup forces. However, film of the wreckage sequence shows that the right spoilers are fully deployed and the left are retracted prior to impact.

Both inboard airbrake actuators were found intact in wing sections. Both of the actuators had a measured extension of 0.55 inches. Both outboard airbrake actuators were found with the linkage severally damaged from impact. The left hand was fully retracted and the right was extended 0.90 inches. The inboard actuators indicate an airbrake position of 2 or 3. The outboard actuators do not agree as one indicates 0 airbrakes and the other suggests airbrakes 3 or 4. The evidence indicates the airbrakes were probably in position 2 or 3. No firm conclusion can be made on the airbrake setting since the actuators can change position due to the impact forces.

F. FLAP SYSTEM - All four flaps, eight flap drive screws, flap drive motor and timing screw were recovered. All damage to the flaps was post impact damage and no evidence was found to indicate an inflight failure. The flap drive screws and flap drive timing screw indicate the flaps were in the fully extended position. All flap tracks were inspected and no evidence was found to indicate an inflight failure. The flaps were in the fully extended position which can be supported by film evidence. Position of cockpit flap selector could not be determined due to the extensive cockpit damage.

IV. Determination

There was no evidence to suggest there was any kind of flight control malfunction before impact with the ground. The evidence suggests the pilot was trying to roll the aircraft to the right using full right spoilers at time of impact. The airbrake was probably in the airbrakes 2 or 3 position. The flaps were in the fully extended position. The rudder was near its trim position and nearly neutral at time of impact. The horizontal stabilizer was set at 1.9 units of aircraft nose down trim. The elevator position could not be satisfactorily determined. The above findings are consistent with all the film evidence.



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PULSION SYSTEM INVESTIGATION REPORT

B52H, S/N 61-026 Class A Aircraft Mishap, 24 June 1994
ALC Investigator: Mr. Troy Maddox, OC-ALC/LPARPB


A. Investigation and analysis of all eight engines installed on this aircraft was completed on site. None of the engines had been moved from their locations prior to my arrival at the scene. The eight engines all sustained extremely heavy impact damage to the fan sections, compressor and turbine sections. All externally mounted engine accessories were broken/torn loose from the engines and sustained severe post-impact fire damage. All eight engines were rotating in the low power, low revolution per minute (RPM) range. This is evidenced by:

1. Compressor and turbine rotor blades bent in both the direction of rotation and direction opposite rotation in numerous areas of the engines while absorbing the impact forces.
2. Little or no ingestion of dirt and debris was evident in the combustion chambers and beyond.
3. Little evidence of compressor blade interference, stator or rotor rubs, shroud rub or of high speed rotation elsewhere on any of the engines.
4. All eight engine overboard compressor bleed valves were in the open position at impact and were captured in the open position by impact forces. This indicated the engines were operating in the idle (60%) to bleed valve opening (80%) range at impact.

Review of Joint Oil Analysis Program (JOAP), Engine Condition Monitoring Program (ECMP) and engine historical records revealed that no adverse wear metal trends or chronic engine operational problems existed on any of the engines prior to the mishap.

B. Conclusions:

1. The eight engines were capable of producing rated thrust until impact.
2. There is no evidence of overtemperature of any of the engines prior to impact.
3. There is no evidence of overspeed of any of the engines.
4. No maintenance discrepancies were noted during this analysis.


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L

DATE: 94-06-24 ACP: TYPE: B-52H FROM: FAIRCHILD AFB, WA HOME STN: FAIRCHILD AFB, WA

MISSION: SERIAL: 61-0026 TO: FAIRCHILD AFB, WA PILOT: LT COL A.A.HOLLAND

MOST FORWARD/AFT, CORRECTIONS (Ref. 11) ! REF ! ITEM ! WEIGHT ! INDEX

! CHANGES + or - ! 1 ! BASIC AIRCRAFT ! 186100 ! 53.4

COMPT ! ITEM ! WEIGHT ! INDEX ! 2 ! OIL (82) Gal ! 600 ! 53.0

! 3 ! COMPT!NO!WEIGHT!CARGO/MISC ! !

! A ! 4 ! 270 ! ! 1100 ! 49.7

! REF 4 OPERATING WT (22.0%) ! 187800 ! 49.7

TOTAL WT ADDED ! ! ! CHAFF ! 300 ! 49.9

TOTAL WT REMOVED ! ! !

NET DIFF. (Ref. 11) ! ! ! 4A ! NO FUEL LANDING WEIGHT ! 188100 ! 49.9

REMARKS: FUEL @ 6.3 LBS/GAL ! 5 ! AMMO ! !

TAKEOFF FUEL LOAD ! ! !

TANK WT/1000 INDEX ! !

OB 14.6 73.0 ! 6 !

1&4 18.0 78.0 ! !

2&3 42.0 47.5 ! B !

AB 3.0 51.6 ! O !

CW 0.0 51.6 ! M !

FB 0.0 51.6 ! B !

MB 0.0 51.6 ! S !

EXT 8.8 63.1 ! !

TOT 86.4 63.1 ! 7 ! FUEL ! 86400 ! 63.1

! 8 ! MISC VARIABLES ! !

START FUEL 3600 LBS ! !

! 9 ! TAKEOFF COND (Uncorr) ! 274500 ! 63.1

! 10 ! TAKEOFF CG (%MAC) ! ! 26.8%

LIMITATIONS ! 11 ! CORRECTIONS (If Req) ! !

GROSS WEIGHT TAKEOFF!GROSS WEIGHT LANDING! 12 ! TAKEOFF CONDITION (Corr) ! !

488,000 ! 488,000 ! !

! 13 ! TAKEOFF CG (%MAC) ! !

PERMISSIBLE ! FORWARD ! AFT ! !

CG TAKEOFF ! 16.1% ! 35.0% ! 14 ! TAKEOFF FUEL ! !

PERMISSIBLE ! FORWARD ! AFT ! Less !

CG LANDING ! 16.9% ! 35.0% ! Exp !

COMPUTED BY: *AA/Full* ! 15 ! EST LANDING FUEL ! !

WEIGHT and BALANCE AUTHORITY: ! 16 ! EST LANDING COND. ! !

PILOTS SIGNATURE: *AA/Full* ! 17 ! EST LANDING CG. ! !

USAF AIRCRAFT ACCIDENT INVESTIGATION REPORT INDEX TAB FORM

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AA SUPPORTING ADDITIONAL DATA

M

CERTIFICATE OF DAMAGE

I certify that B-52H aircraft, S/N 61-026, was completely destroyed in the crash and post impact fire/breakup on Fairchild AFB, Washington, on 24 Jun 1994, and is beyond economical repair. Cost of the subject aircraft, engines, electronics and modifications to date, (IAW AFI 65-503, Attachment A10-1, dated 15 Feb 94) is 73.7 million dollars. Government property damage includes preliminary estimate of \$32,476 for repair of power substation and a preliminary estimate of \$58,950 for environmental cleanup of the crash site. See Tab O.

Richard A. Lane
RICHARD A. LANE, Maj, USAF
Maintenance Member

USAF AIRCRAFT ACCIDENT INVESTIGATION REPORT INDEX TAB FORM

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N



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 92D AIR REFUELING WING (AMC)
FAIRCHILD AIR FORCE BASE, WASHINGTON

11 July 94

TRANSCRIPT #1

- (1) Subject: H/B52 Mishap
- (2) Identify of The Recording Facility: Fairchild Tower (SKA)
- (3) Facilities and Controller Positions and Abbreviations:

Ground Control (GC)
Outside Line (OL)
CZAR 52 (C52)
EARL 01 (E01)
Aircraft 3538 (AC 3538)
WAYLAY 02 (W02)
Transit Alert (T)
Aircraft 1452 (AC 1452)
KNIGHT 23 (N23)
Barrier Maintenance (BM)
Engine Seven (Crash)
BLADE 13 (B13)
EXPO 92 (EX 92)

- (4) Position Being Recorded: Position #1 (GC)
- (5) Date and Time Covered by the Transcript: 24 Jun 94 2002:00-2117:30
- (6) Source of Time Entries: DIGI Time with Auto Search
- (7) To avoid duplication, portions of this transcript are not transcribed because the controller working the position being transcribed is monitoring another position. Transmissions that appear to be omitted are actually transcribed in the appropriate position.
- (8) Certification: "As custodian of the original recording, I certify this to be a true and exact transcript."


CAROLYN J. HEVDT, Capt, USAF
Commander, Airfield Operations Flight

2002:00-No Transmissions

2002:15

C52: Fairchild Ground CZAR Five Two, uh, equipment check, uh, on, uh, stub, uh, thirty-six, do you read?

GC: CZAR Five Two Ground you're loud and clear

C52: Altimeter, uh, Sir

GC: CZAR Five Two altimeter three zero one four

C52: Three zero one four for CZAR Five Two, and, uh, we'll be, uh, VFR flight plan at, uh, on the hour

GC: CZAR Five Two roger

GC: CZAR Five Two I have your class C clearance available when ready to copy

C52: Go ahead Sir for Five Two

GC: CZAR Five Two departure frequency will be three eight four point niner, squawk zero three two zero

C52: Four nine, three eight two zero for CZAR Five Two

2003:00-No Transmissions

2004:00-No Transmissions

2005:00-No Transmissions

2006:00-No Transmissions

2007:00-No Transmissions

2008:00-No Transmissions

2008:58

W02: Ground, WAYLAY...

2009:00

W02: ...Zero Two is clear

GC: WAYLAY Zero Two welcome to Fairchild hold short of the parallel taxiway

W02: WAYLAY Zero Two

T: Roger thank you ***

T: Hey, you got customs on the way I see you got that T- Thirty-Three over here

UNK: (unreadable) Standby

GC: Transit Alert, Tower

T: Uh, Tower this is Transit on the A-Four send him down to taxiway Echo please

GC: Roger, he's an A-Ten

T: Yeah an A-Ten

GC: WAYLAY Zero Two, make a right turn on the parallel taxiway, taxi northeast bound follow me will pick you up

W02: WAYLAY Zero Two roger

2010:00-No Transmissions

2011:00-No Transmissions

2012:00-No Transmissions

2013:00-No Transmissions

2014:00-No Transmissions

2014:23

GC: Tower's on

BM: Tower this is Barrier Maintenance requesting clearance to cross your active from the Oh-five Deep Creek side barrier

GC: Barrier Maintenance hold short of the runway

BM: Roger Tower, holding short ***

2014:46

GC: Barrier Maintenance proceed across the runway report when off

BM: Roger Tower, proceeding across will report when off

2015:00

2015:13

BM: Tower, be advised Barrier Maintenance clear of the active

GC: Barrier Maintenance, roger

2016:00-No Transmissions

2017:00-No Transmissions

2017:31

GC: Transit Alert, Tower

T: Go ahead

3

GC: Where would you like this T-Thirty-Three?

T: Uh, Echo

GC: Roger

2018:00

C52: Ground, CZAR Five Two startin' engines stub thirty-six

GC: CZAR Five Two, roger

GC: NITE Two Three, Ground, you up?

N23: Ground, this is NITE Two Three

GC: NITE Two Three, welcome to Fairchild, make a right turn on the parallel taxiway, taxi northeast bound follow me will pick you up in about two thousand feet

N23: Two Three

AC1452: Fairchild Ground, this is aircraft Fourteen Fifty-Two

GC: Fourteen Fifty-Two, Ground

AC1452: Request, uh, hot de-fuel at this time on spot forty-five

GC: Fourteen Fifty-Two say again?

AC1452: Request hot de-fuel at this time on stub forty-five

GC: Standby

N23: And Ground, this is NITE Two Three, is it possible for us to park next to the other Canadian, uh, dude over there please?

2019:00

GC: Calling Ground, say again?

N23: Ground this is NITE Two Three, uh, wondering if we can park next to the other canadian aircraft, er, the, uh, trainer

GC: Aircraft Fourteen Fifty-Two, approved as requested, monitor this frequency, advise termination

AC 1452: Thanks

GC: NITE Two Three, standby, I'll coordinate

GC: (on Ramp net) UNK: Copy F-Five *** Transit Alert, Tower

T: Go ahead

GC: The T-Thirty-Three is requesting to be parked by the other Canadian aircraft, or is that possible?

T: Naw, well he'll be right across from the CT, but anyway (unreadable) he's gonna go with the airshow aircraft....he'll be close

GC: Roger

2020:00

2020:01

T: Hey, Transit one or two, zero

GC: NITE Two Three, Ground, continue taxiing, Transit said they'll get ya as close as possible to him

N23: Roger thanks

2021:00-No Transmissions

2022:00-No Transmissions

2023:00-No Transmissions

2024:00-No Transmissions

2025:00-No Transmissions

2026:00-No Transmissions

2026:19

GC: Tower's on

CRASH: Fairchild Tower, Seven, permission to cross your active, Delta

GC: Engine Seven, standby

CRASH: Seven's standing by

GC: Engine Seven proceed across runway, Tower will observe you off

CRASH: Understand clear to cross, Tower will observe us off

2027:00

GC: Runway's clear (talking to local)

2028:00-No Transmissions

2029:00-No Transmissions

2029:44

AC1452: Fairchild Ground, this is aircraft Fourteen Fifty-Two

GC: Fourteen Fifty-Two, Ground

AC1452: Roger, terminating hot de-fuel at this time on stub forty-five, request frequency change

GC: Frequency change approved

AC 1452: Thank you and have a nice day

GC: (unreadable)

2030:00-No Transmissions

2031:00-No Transmissions

2032:00-No Transmissions

2032:36

E01: Ground, EARL Zero One taxi

GC: EARL Zero One, taxi to runway two-three, wind two four zero at five, altimeter's three zero one four

E01: Three zero one four, EARL Zero One. Sir we'll stop short of the parallel so the bomber can get by

GC: EARL Zero One roger

GC: EARL Zero One I have a new squawk for your Class C clearance

E01: Zero One go ahead

2233:00

GC: EARL Zero One squawk zero three one one

E01: Zero three one one

2033:42

AC3538: Fairchild Ground, tail thirty-five thirty-eight looking for, uh, clearance for engine start, radio check and altimeter

GC: Thirty-five thirty-eight, you're loud and clear, standby engine run

AC3538: Roger

2034:00

GC: Thirty-five thirty-eight, which stub are you parked on?

AC3538: Sorry about that, we're on stub eleven

2035:00-No Transmissions

2036:00-No Transmissions

2037:00-No Transmissions

2037:25

GC: Three five three eight, Ground

AC3538: Go ahead

GC: Three Five Three Eight your engine run is approved, monitor this frequency report termination

AC3538: Oh, Three Five Three Eight, wilco

2038:00-No Transmissions

2039:00

E01: Fairchild Ground, EARL Zero One

GC: EARL Zero One, Ground

E01: Uh, yes Sir, do you have any idea how long the, uh, EXPO is gonna be in the pattern?

GC: He's full stop on this approach

E01: Copy, thank you

2039:31

GC: EARL Zero One, we have two more proposed inbounds, one at, uh, four seven and one at five four

E01: Copy Sir, thanks, how 'bout after that?

GC: Nothing scheduled after that, everybody's aware of you

E01: (unreadable)

2040:00-No Transmissions

2041:00-No Transmissions

2042:00-No Transmissions

2042:30

B13: Ground, BLADE One Three

UNK: Fairchild Gr...

GC: BLADE One Three, Ground

GC: Calling Ground, say again

B13: Hanger ten oh five, uh, for engine start, we'll be local instrument pattern

GC: BLADE One Three, engine start approved your discretion, altimeter three zero one four

B13: Zero one four

EX92: EXPO Niner Two is clear the active

GC: EXPO Niner Two, Ground taxi to parking

2043:00

GC: BLADE One Three, I understand you would like to go into the instrument pattern?

B13: That's affirmative Sir, just, uh, one approach back to Fairchild

GC: BLADE One Three, roger

2044:00

2044:14

GC: BLADE One Three, Ground

B13: Go ahead

GC: BLADE One Three, you can expect all your approaches in, uh, VFR conditions, I have your Class C clearance if you'd like it

B13: BLADE One Three is ready to copy

GC: BLADE One Three, departure frequency will be three eight four point niner, squawk zero three zero seven

B13: Three eight four niner, zero three zero seven

2044:48

C52: Ground, uh, CZAR Five Two taxi, uh, VFR to Fairchild

GC: CZAR Five Two, Fairchild Ground, taxi to runway two three, wind one six zero at seven, gust one four...

2045:00

GC: ...altimeter three zero one four

C52: One four, uh, for CZAR Five Two

2045:05-No Further Transmissions

2046:00-No Transmissions

2047:00-No Transmissions

2047:43

AC3538: And Ground, this is tail number thirty-five thirty-eight terminating engine run

GC: Three five three eight, roger, frequency change approved

2047:55

B13: Ground, One Three

GC: BLADE One Three, Ground

2048:00

B13: BLADE One Three, request frequency change to Tower for present position take off

GC: BLADE One Three frequency change approved

2049:00-No Transmissions

2050:00-No Transmissions

2051:00-No Transmissions

2052:00-No Transmissions

2053:00-No Transmissions

2053:28

C52: Ground, Fairchild Ground, CZAR Five, uh, Five Two going to Tower

GC: CZAR Five Two, Roger

E01: Zero One going to Tower

GC: EARL Zero One, roger (they're both comin' to ya ((spoken to the Local controller)))

2054:00-No Transmissions

2055:00-No Transmissions

2056:00-No Transmissions

2057:00-No Transmissions

2058:00-No Transmissions

2059:00-No Transmissions

2100:00-No Transmissions

2101:00-No Transmissions

2102:00-No Transmissions

2103:00-No Transmissions

2104:00-No Transmissions

2105:00-No Transmissions

2106:00-No Transmissions

2107:00-No Transmissions

2108:00-No Transmissions

2109:00-No Transmissions

2110:00-No Transmissions

2111:00-No Transmissions

2112:00-No Transmissions

2113:00-No Transmissions

2114:00-No Transmissions

2115:00-No Transmissions

2116:00

2116:32

GC: He's going down, get the crash phone! (Loud Squeal)

2117:06

GC: Steve can I have the runway to cross...Fire Department...they're comin', they're comin'

2117:11

GC: Tower's on the crash net

GC: Runway crossing approved for all Fire Department and Emergency Vehicles, acknowledge



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 92D AIR REFUELING WING (AMC)
FAIRCHILD AIR FORCE BASE, WASHINGTON

11 July 1994

TRANSCRIPT #2

- (1) Subject: H/B52 Mishap
- (2) Identity of The Recording Facility: Fairchild Tower (SKA)
- (3) Facilities and Controller Positions and Abbreviations:
 - Local Control (LC)
 - Spokane Approach (GEG APP)
 - CZAR 52 (C52)
 - EARL 01 (E01)
 - BLADE 13 (B13)
 - Spokane Tower (GEGT)
 - PINTO 21 (P21)
 - Charlie (CH1)
- (4) Position being Recorded: Position #2 (LC)
- (5) Date and Time Covered by the Transcript: 24 Jun 94 2050:00-2117:30
- (6) Source of Time Entries: DIGI Time with Auto Search
- (7) To avoid duplication, portions of this transcript are not transcribed because the controller working the position being transcribed is monitoring another position. Transmissions that appear to be omitted are actually transcribed in the appropriate position.
- (8) Certification: "As custodian of the original recording, I certify this to be a true and exact transcript."


CAROLYN J. HEYDT, Capt, USAF
Commander, Airfield Operations Flight

2050:00-No Transmissions

2050:11

B13: Tower, BLADE One Three

LC: BLADE One Three, Tower

B13: Sir, BLADE One Three's on the ladder abeam hangar ten-o-five for, uh, present position takeoff

LC: BLADE One Three, roger, proceed as requested, wind one two zero at one zero

2051:00

2051:44

B13: Tower, BLADE One Three is switching to Departure

LC: BLADE One Three, maintain at or below four thousand, contact Departure

B13: (unreadable) One Three, four thousand

2052:00

2052:27

GEGT: Fairchild Tower, Spokane Tower, (garbled) approval request

LC: Tower

GEGT: Senica going to Port Angeles, uh, like to transition through your airspace VFR

LC: Approved, S-A

GEGT: O-I.

2053:00

2053:37

C52: Uh, Fairchild Tower, CZAR Five Two, uh, with ya number one and, uh, how close are the two inbounds sir?

LC: CZAR Five Two Heavy, Fairchild Tower, I don't even have 'um on the screen yet

2054:00

C52: Uh, Tower CZAR Five Two, uh, ready for take off and, uh, we'd like to, the three sixty around you

LC: CZAR Five Two Heavy, taxi into position and hold for release

C52: Five Two on to hold

UNK: Tower say winds

2055:00

LC: Wind one two zero at five

UNK: Thanks

2056:00

2056:56

LC: CZAR Five Two Heavy, I'm awaiting a release from Spokane Departure, and sir if ya could, uh, maint, uh, main, er, remain on my frequency, can you monitor, uh, Departure frequency three eight four decimal niner also?

2057:09

C52: Affirmative for, uh, CZAR Five Two and, uh, EARL, uh, three eighty-four nine on the other radio

LC: CZAR Five Two Heavy, roger, continue holding

2058:00

LC: CZAR Five Two Heavy, wind one four zero at four, cleared for takeoff

LC: CZAR Five Two Heavy, Tower

C52: Five Two, did you say we're cleared for takeoff?

LC: CZAR Five Two Heavy, affirmative, wind one three zero at four, cleared for take off

C52: Ok, we're gonna make a left three-sixty right around you and climb it up to five thousand

LC: Roger Sir, proceed as requested

C52: (unreadable) We're on the roll, Zero One

E01: Tower, EARL Zero One ready for take off

LC: EARL Zero One Heavy, roger wind one three zero at five, cleared for takeoff, caution wake turbulence

E01: EARL Zero One, we're gonna wait for CZAR to make his 360 and follow him out

LC: EARL Zero One, roger understand

2059:00

LC: EARL Zero One Heavy, wind is now one five zero at eight

E01: Zero One

2100:00

LC: CZAR Five Two Heavy, you have traffic, three miles, twelve o'clock, a dash eight, nine thousand, descending

C52: Rodg

C52: We're level five

LC: CZAR Five Two Heavy, roger

C52: EARL Zero One, you airborne yet?

LC: CZAR Five Two Heavy, company traffic is airborne

C52: (unreadable)

2101:00

C52: Zero One, Five Two, uh, we're starting our left turn back in bound, you got us in sight?

E01: (unreadable)

2102:00

LC: CZAR Five Two Heavy, do you want your max climb to twelve thousand after your next tear drop?

C52: That's affirmative

LC: Uh, roger

E01: The same for EARL Zero One sir

LC: EARL Zero One Heavy, roger

C52: Don't worry we're not gonna hit ya

LC: CZAR Five Two Heavy, after your next approach you're cleared to twelve thousand

C52: Five Two, copy

C52: Comm'n' around, Zero One, you got us in sight?

E01: In sight (garbled)

2103:00

C52: CZAR's level three thousand

LC: CZAR Five Two Heavy, you have traffic five miles, uh, BLADE One Three, UH-1, three thousand two hundred, he's, uh, inbound to Spokane at this time

C52: Roger, we're in a, uh, right teardrop back to you at this time

LC: CZAR Five Two Heavy, roger

C52: EARL Zero One, where are you?

GEGT: Fairchild Tower, Spokane Tower

LC: Fairchild

C52: Ok, Zero One push it up now (on freq. 289.6)

2104:00

GEGT: BLADE One Three is on a mile and a half final from my runway two one here, he'd like a low approach and then transition to you, er, uh, how would you like him?

LC: Uhhh, put him on a left downwind to five

GEGT: A left downwind, runway five VFR, Kilo Mike

LC: Thank you, S-A

LC: CZAR Five Two Heavy contact departure

2105:00

C52: Zero One, we're off-center (unk, unreadable)

C52: All right, Zero One we're turning back in bound to zero five at this time, I'm six thousand

2106:00

E01: Zero One's in the climb

B13: Tower, BLADE One Three

LC: BLADE One Three

LC: BLADE One Three, Tower

B13: BLADE One Three is just off the international, would like to proceed direct to the South Training Area

LC: BLADE One, BLADE One Three, roger

E01: Zero One is, uh, topping out

E01: Turning right

C52: RA, right now on final

C52: I'm at four thousand, still on about two-twenty indicated

GEG APP: Fairchild Tower, Spokane Approach *** PINTO Two One, C-130... he's about, uh, thirty-five to the ssss, to the south, uh, west there, do you want us ta hold him out, er, how?

E01: Zero One say...Five Two, say position

2107:00

C52: Uhm.. two miles off the end, off the approach end of zero five, we're level at four thousand indicating about two twenty

E01: Five Two, if I don't see you, I'll just extend my turn to final until I've got you and you're, uh, I'm pretty much abeam ya

C52: Roger

LC: CZAR Five Two Heavy, Tower

C52: Go-head

LC: Five Two Heavy, traffic is a UH-1, three miles, uh, north east of the field at this time, in bound, uh, South Training Area, he'll remain, uh, well south east of the runway

C52: Five Two copies that

C52: And Tower, Zero, uh, Five Two Heavy, we're, uh, left closed, touch and go

LC: CZAR Five Two Heavy, left closed traffic approved

2108:00.

LC: CZAR Five Two Heavy, uh, company traffic is on five mile dog-leg

C52: Zero One, got you in sight, we're heading at you, turning to set um up

E01: Okay

2109:00

CH1: Fairchild Tower, Charlie

LC: Callin' Tower say again

CH1: Roger, uh, this is, uh, Charlie One, uh, just wondering the, uh, helicopter traffic while we have the, uh, (unreadable)

C52: Zero One, Five Two turning behind you now

LC: Charlie One that, uh, that traffic will be remaining south, uh, south east of the runway at this time, I can have him transition over to, uh, helipad five, if you like

CH1: Well, uh, as long as we can keep the safe separation between, uh, him and, uh, and the heavies, uh, during their, uh, routine, uh, that'll work, but, uh, we'll want to keep a real close eye on that

LC: Charlie One, roger

LC: BLADE One Three, sir, uh, if you could transition over to helipad five until these guys are done doin' their demonstration practice...

C52: Hey, Zero One, we're rolling out on final behind you

LC: Wind one eight zero at six

2110:00

B13: Tower, One Three

LC: BLADE One Three, Tower

B13: Sir, we'd like a Class C, we're gonna, uh, head over to, uh, Felts Field just to get out of the area. So we're not interfering with these guys

LC: BLADE One Three, roger, stand by

UNK: Maintain, uh, about a thirty degree, uh, turn here, (unreadable) degrees of bank

2111:00

LC: EARL Zero One Heavy, will this be your last teardrop?

E01: That's affirmative sir, uh, after this we'll pitch up for the touch and go

LC: Roger

E01: Touch and go and then we're gonna full stop

LC: Roger

GEG APP: Tower, Approach

LC: CZAR Five Two, will that be the same for you, one more teardrop, touch and go to a full stop?

C52: That's a negative, we'll do a touch and go and, uh, stay with you for about another thirty minutes or so

LC: CZAR Five Two Heavy, roger

C52: We're gonna have to extend beyond Airway Heights here a minute.

UNK: We'll go down to two hundred feet now

UNK: Whenever you get rolled out on final

UNK: I'm gonna be way the hell behind you

UNK: All righty

2112:00

E01: Zero One is two hundred feet above (unreadable)

C52: Rodg

LC: BLADE One Three, execute a left turn out, uh, proceed direct northeast bound

B13: BLADE One Three

2113:00

LC: BLADE One Three, squawk zero three zero seven

B13: Zero three zero seven, BLADE One Three, do you want us to continue northeast bound?

LC: Affirmative

UNK: In the break

C52: Lookin good there, Zero One

E01: Thanks

C52: Don't have to use (unreadable) slow down do ya

GEG APP: Tower, Approach

LC: EARL Zero One, squawk one two zero zero

E01: Zero One

E01: Unable right now, Tower

2114:00

B13: Tower, BLADE One Three

P21: Fairchild Tower, PINTO Two One

LC: PINTO Two One, Tower, stand by

LC: BLADE One Three, go ahead

B13: We'd like to amend our clearance to go to Hayford and then, ah, after Hayford returning back to Fairchild to pick up the jumpers

LC: BLADE One Three, roger

C52: I'm off to your five o'clock position, obviously I'll just wait 'til you turn in front of me

LC: EARL Zero One Heavy, confirm full stop

E01: Touch and go for EARL Zero One

LC: Roger

E01: Right base, gear down, touch and go, EARL Zero One

LC: EARL Zero One, wind two zero zero at one two, cleared touch and go

E01: Cleared touch and go, EARL Zero One

LC: PINTO Two One, Fairchild Tower, runway Two Three is in use, altimeter is three zero one two, you gonna be number three to field, traffic is Heavy B-Fifty Two turning base at this time

2115:00

P21:--PINTO Two One has, uh, both airplanes in sight, thanks

UNK: (Unreadable)

LC: BLADE One Three, frequency change approved

B13: One Three

C52: EARL Zero One, uh, we'll go by you on your left

E01: Roger

LC: PINTO Two One, will this be a full stop?

P21: PINTO Two One, affirmative

LC: Roger

C52: And Tower, Five Two, we've got Zero One in sight, we'll just adjust

LC: Roger

C52: How 'bout just a three sixty. ...

2116:00

C52: ...around you right now to get us some spacing?

UNK: (unreadable)

LC: CZAR Five Two Heavy roger, traffic is a C-130 approaching base leg, uh, he'll be a full stop

E01: Tower, EARL Zero One, request closed

LC: EARL Zero One Heavy, extend your upwind three miles, then closed traffic approved

E01: Three miles

2116:30

LC: EARL Zero One, uh, I need you to, uh, go North of the field and hold at or below three thousand seven hundred, five miles north of the field

E01: EARL Zero One

2117:00

LC: PINTO Two One, wind estimated two zero zero at one two, cleared to land

P21: PINTO Two One

LC: PINTO Two One, disregard that sir, I need you to go around

P21: PINTO Two One is on the go



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 92D AIR REFUELING WING (AMC)
FAIRCHILD AIR FORCE BASE, WASHINGTON

11 July 1994

TRANSCRIPT #3

- (1) Subject: H/B-52 Mishap
- (2) Identity of Recording Facility: Fairchild Tower (SKA)
- (3) Facilities and Controller Positions and Abbreviations:
 - Watch Supervisor (WS)
 - Flight Data (FD)
 - Spokane Watch Supervisor (GEG WS)
 - Outside Lines (OL)
 - Spokane Flight Data (GEG FD)
- (4) Position Being Recorded: Position #4 (WS)
- (5) Date and Time Covered by This Transcript: 24 Jun 94 1444:00-1456:00
- (6) Source of Time Entries: DIGI Time and Search
- (7) To avoid duplication, portions of this transcript are not transcribed because the controller working the position being transcribed is monitoring another position. Transmissions that appear to be omitted are actually transcribed in the appropriate position.
- (8) Certification: "As custodian of the original recording, I certify this to be a true and exact transcript."


CAROLYN J. HEYDT, Capt, USAF
Commander, Airfield Operations Flight

1444:00

GEG FD: Tracon Data

FD: Fairchild, I just put in CZAR Five Two

GEG FD: Yeah

FD: Into the, uh, should be in the tab list over there*** He's not going to depart 'til seventeen hundred but they already called it up so I put it in. He's going to be doing an airshow practice.

GEG FD: Let's see if we got it here. I don't see it, hang on a sec*** I didn't print a strip, well it wouldn't print a strip out.

FD: Should be in the VFR, (unreadable) I'm sorry

GEG FD: You put a proposal in at seventeen hundred

SKA FD: Naw it's a VFR

GEG FD: Aw, ok, just a sec

FD: Should be in your TAB over there

GEG FD: Yeah he's in there, where's he goin'?

FD: He's gonna be VFR around Fairchild. He's gonna be doin' an airshow practice for the airshow

GEG FD: Practice for the airshow, aw ok and ah

WS: Sgt Wimsett may I help you

OL: Hi this is Lieutenant Colonel Holland over at (unreadable)

WS: How ya doin Sir?

OL: Pretty good pretty good hey we're gonna beating up the local pattern here on our oh an quasi airshow practice

WS: (laugh) Ok

OL: Starting at ah ten o'clock for about an hour

1445:03

WS: Ok

OL: And ah...

WS: Wa...what do ya need?

OL: Ok, we're gonna file VFR

WS: Right

OL: And I understand that normally the top of your airspace is about four thousand, forty-five hundred something like that.

WS: Ah, well we actually own surface to five but ah approach don't necessarily agree with us on that. But that's what it says in the book.

OL: Cause I'll tell ya wha well what we'd like to do we're gonna take off as a cell with the tanker.

WS: Ok

OL: We being the bomber, are going to go first

WS: Uh huh

OL: We're gonna takeoff wa we're gonna come...were you here last Friday?

WS: No Sir, I was on leave last Friday.

OL: Ok we're gonna take off and we're gonna, we wanted to do a tight three hundred and sixty degree left hand turn right around you, in other words we'll takeoff get the gear up fly by the Tower and then pull up and do like a three hundred and sixty degree turn right around the Tower.

1446:00

WS: To the left?

OL: To the left

WS: Ah ok

OL: Don't worry, don't worry we won't, well we probably won't be any more than a quarter mile at the most.

WS: Yeah (unreadable)

OL: Beyond you

WS: Ok but that'll still be somethin'... I'll have to work out.

OL: Yeah, yeah, right, right

WS: Ok

OL: And then our profile is pretty much gonna be we'll take off first, we're gonna do a, we'd like to do a three sixty right around you and then depart off to the southwest. We would like to climb to five thousand feet

WS: That should be no problem.

OL: In the bomber, as soon as we rolled out heading southwestbound in front of the Tower, the the tanker wants to go

WS: OK

OL: And he is gonna go just a straight takeoff to the southwest, he wants to climb to six thousand feet.

WS: OK

OL: And what we're gonna do is ah off of that departure we're gonna go ah maybe about ah five miles to the southwest and then we wanna do a left hand tear drop back to zero five

1447:00

3

OL: And then we, being the bomber, will come first, we'll go probably about three DME off the TACAN. And then do ah, we'd like to do ah left hand teardrop back to five and the tanker will extend out to maybe about five or six DME and then he'll do a left hand tear drop back to zero five, and then we'll do uh a teardrop to five, then we'd like to do break off about midfield and then enter a uh like uh right hand teardrop back for two-three.

UNK: Andre

OL: And on the second pass which would be the the the basically the first time we came by on two-three we'd like to get uh if at all possible clearance up to about twelve thousand feet.

WS: Ok, on the second pass

OL: The second pass on two-three, we gonna take off on two-three

WS: Ok (unreadable) let me read this back and

OL: (Laughter)

WS: Let's see if I can, you're gonna depart initially, do a left hand three sixty around the Tower, roll out about mid-field, at that point the KR-35 is gonna roll

OL: Right

1448:00

WS: He's gonna go out, you're gonna make your teardrop back to five at three DME at five thousand, he's gonna make his at six

OL: Right

WS: He's gonna do it at about five DME, both of you are gonna make a low pass over to

OL: Right

WS: Runway five

OL: Right

WS: And execute another right hand teardrop back to runway two-three

OL: Correct

WS: And at that time you're gonna be requesting twelve thousand on that climb

OL: That's right, we're gonna come through first and do our climb to twelve and then uh he's gonna be behind us, probably uh thirty seconds or so, and then he's gonna come in about the same mid field, and then he's gonna go to twelve.

4

WS: Ok, now on your first teardrop to runway five what are you gonna roll out as an altitude, when you pull back up to your uh to execute your right teardrop to two-three?

OL: Okay well we won't go above uh maybe three thousand feet

WS: That won't be a problem then

OL: We won't come, we won't get above your, ya know just like what we'll probably do is all the teardrops

WS: That's all yeah you don't (unreadable)

OL: The height of the teardrop will be the traffic pattern altitude. Say thirty-seven hundred feet

WS: Ok

OL: And then after the climb out, we'll be climbing to twelve thousand feet heading off to the southwest

WS: Right

OL: Then as soon as we get level at twelve...

1449:00

OL: ...we'll start uh a uh, pretty much a descending teardrop back to zero five and for us, the B-Fifty Two, we're gonna come through like at four thousand feet, just do like an overhead pattern, and the tanker, when we are just about, if you can visualize this, when we're on the downwind in overhead pattern, the tanker should be just about over the threshold, for zero five doing a altitude ya know landing altitude demo.

WS: Ok

OL: And then we will follow, we will roll out behind him and we will both break off to the left and do another right teardrop to two-three and then we will come in, and he'll pitch up and they'll probably do a touch and go, and then we'll pitch up and do a touch and go, and the for all practical purposes then we're separated from then on for about the next hour or so and we'll just be out there dorkin' off

WS: Ok

OL: (Laughter)

WS: Sound's like it's gonna be fun

OL: Yeah, and the other thing is if you could check with uh Approach and tell 'em that uh...

1450:00

OL: ...on a lot of these stunts we'll be exceeding two hundred and, uh, traffic, and, uh, traffic pattern here and, uh, we'll be let's see what else, and on a couple of 'em we'll be like about three-fifty indicated on the pull-ups

WS: Ok

OL: And if they got any heartburn with that let us know

WS: Ok, Sir where's a good number I can reach you at?

OL: (Laughter) And, uh, like I say we'll be, we'll be out there, we'll shoot on about a ten o'clock take off local

WS: Ok, Sir

OL: Hey, thanks a lot

WS: Do you got a phone number I can reach you at Sir?

OL: Right now we're just at Base Ops

WS: Oh, Ok

OL: You've got a hot line to Base Ops

WS: Oh yeah, oh yeah

OL: We'll be here probably we'll be at Base Ops for another forty-five minutes or so

WS: -Ok, OK, Sir

OL: Ok, Thanks

WS: Uh huh

OL: Bye

WS: Bye

WS: Well they did it last year too

1451:00

GEG WS: Spokane's Sup's desk

WS: Yeah, how ya doin' this is Sgt Wimsett Watch Sup over here at Fairchild

GEG WS: Yep

WS: Yeah how ya doin' today

GEG WS: Good

WS: I, um got a special request...Colonel Holland just called me, he's the pilot of the B-Fifty Two who's gonna be flyin' the Demo on Sunday (unreadable)

GEG WS: CZAR Five Two

WS: Yeah

GEG WS: Yeah

WS: He's going up this morning to practice

GEG WS: Yeah we got a, I think we put him in the tab already

WS: Yeah, ok, what he wants to do, I'll try and break this down quickly and as easy as I can for you, he wants to depart runway two-three, which is what we're landing right now, he's gonna do a left turn three left hand, three-sixty right here in the pattern, make a loop around the base of the Tower, or around the Tower cab, roll back out on downwind in front of the Tower and then he's gonna depart runway two-three, and what's gonna happen at that point is the KR-Thirty-Five is gonna request to depart at the same time

GEG WS: Ok

WS: So basically he's gonna be about mid field airborne, and the KR-Thirty-Five is gonna start his departure roll

GEG WS: Ok

WS: The B-Fifty-Two is going to climb to five thousand, go out to about three DME...

1452:00

WS: ...and execute a teardrop back to runway five and the KR-Thirty-Five is gonna go out to about five to six DME and do the same thing at six thousand, execute a teardrop back to runway five

GEG WS: Ok

WS: Ok, and after they have done that

GEG WS: They gonna stay with you on all this

WS: Well, they can if you want them if you want 'em, if you want me to keep 'em on my frequency I can do that if you want to take the pointout

GEG WS: Yeah

WS: Now if he's gonna go out to almost six DME he's gonna be actually out of the Tower airspace, but...

GEG WS: Yeah that's right

WS: You know, if I, if I can, if you want me to work 'em on the frequency I can, ya know reference your traffic

GEG WS: I think, uh, at the time why don't you coordinate and, uh, see what...

WS: Ok

GEG WS: ...if we want to work him or not

WS: Okay, let me finish telling ya what else he wants to do here...okay, well now after he's done his teardrop back to runway five he'll be doin' uh, the same thing just basically here in the Tower pattern...executing uh, another one-eighty teardrop to runway two-three, so basically he's gonna break it off at the approach end of five...

1453:00

WS: ...execute a right teardrop back to runway 23

GEG WS: Does he have to make a right teardrop?

WS: Well it won't be, it'll be in our airspace, it'll be north of the airport, it'll be actually be like just like a normal-closed-traffic pattern here in the Tower

GEG WS: If he's going to five it seems like a right teardrop, a right turn on the missed

WS: Ok, oh

GEG WS: You mean...

WS: What he's gonna do is just like a circling approach, same thing basically

GEG WS: Ok

WS: A circling approach to the north

GEG WS: Ok

WS: Ok after he does that that's when he's request a max climb up to twelve thousand and obviously we'll have to coordinate that

GEG WS: Yeah

WS: As soon as he is requesting it, as soon as we see him turnin', probably right base out there to two-three we'll be callin you for release and the climb to twelve

GEG WS: Yeah

WS: Which, well, really isn't that unusual because it'll be just like a normal departure

GEG WS: Yeah

WS: Yeah, you know just climbin' up to twelve thousand

GEG WS: Now this is with both of them, right?

WS: Right, this will be with both aircraft, now he's gonna after that obviously we'll be shipping him to your frequency if he's gonna climin' that high we don't need to be talking to him

GEG WS: Yeah

WS: And then he wants to go out to five or six, seven, eight miles, he said and do another teardrop...

1454:00

WS: ...back to runway five, so basically what he's doin' is, ya know, makin' Curly Cues to either end of the runway

GEG WS: Makin' what?

WS: Well, what do you call 'em, wooferdils, wooferdils I think these guys call 'em there, like left ninety, right two-seventies to the runway, only he is doing 'em a little wider, he's doin' 'em you know at seven or eight miles, usually they do them right here within our pattern but

GEG WS: Yeah ok

WS: Ok

GEG WS: They'll go up to twelve out to five to eight DME and drop back to runway Five

WS: Right

GEG WS: Stay with you again then after that

WS: No, and then after that he'll do one more teardrop to two-three and at that point him and the KR Thirty-Five will split up and they will be doin' whatever they're gonna be doin' on the last hour that they're on their own, they will be separate. They will not be a flight anymore

GEG WS: Ok

9

WS: Ok (unreadable), Sir a lot of the stuff that he's gonna be doing here in the Tower pattern he's gonna be exceeding the two hundred fifty knots.

GEG WS: Yeah

WS: Ok?

1455:00

WS: And then when he does his pull-up on his climb to twelve he will probably be exceeding three hundred fifty knots, when he does that

GEG WS: Ok

WS: And he told me to find out if y'all don't have any problem with that

GEG WS: Well, I don't think so

WS: Yeah didn't ya know he (laughter)...Like I said I'll call you back. He's planning on departin' at ten o'clock so I'll call you back probably about nine thirty when he starts taxiing out.

GEG WS: Ok

WS: All right and we'll try and get some of that set into motion for him

GEG WS: Ok

WS: All right Sir

GEG WS: Ok, I'll try and, uh, brief the west controller on all of this

WS: Yeah, a lot of it I think will be done right here in the Tower pattern, uh the things that are going to affect you the most will be when he's executing those teardrops back to runway five

GEG WS: Yeah

WS: Cause if you guys got departure traffic commin' off twenty-one

GEG WS: Well if he's out there, you know, if he's out five or six miles and he doesn't make too wide a turn

WS: Right...

GEG WS: It, it shouldn't affect us that much

WS: Yeah

GEG WS: You know, the climb to twelve we'll need to coordinate that
10

WS: Right

GEG WS: So that we can keep people out of the way

1456:00

WS: Ok

GEG WS: And, uh, other than that I think we should be able to work with 'em

WS: Ok Sir

GEG WS: All right

WS: All right

GEG WS: Thanks for calling

WS: D-W

GEG WS: Bye

11



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 92D AIR REFUELING WING (AMC)
FAIRCHILD AIR FORCE BASE, WASHINGTON

11 July 1994

TRANSCRIPT #4

- (1) Subject: H/B52 Mishap
- (2) Identity of The Recording Facility: Fairchild Tower (SKA)
- (3) Facilities and Controller Positions and Abbreviations:
 - Watch Supervisor (WS)
 - Base Ops (BOPS)
- (4) Position Being Recorded: Position #4 (WS)
- (5) Date and Time covered by the transcript: 24 Jun 94 1529:30-1530:30
- (6) Source of Time Entries: DIGI Time and Search
- (7) To avoid duplication, portions of this transcript are not transcribed because the controller working the position being transcribed is monitoring another position. Transmissions that appear to be omitted are actually transcribed in the appropriate position.
- (8) Certification: "As custodian of the original recording, I certify this to be a true and exact transcript."


CAROLYN J. HEYDT, Capt, USAF
Commander, Airfield Operations Flight

1529:30

WS: Tower

BOPS: Hey it's Lieutenant Colonel Holland again and now I'm on change three I guess

WS: Ok.

BOPS: It looks like our takeoff now is gonna be slipped until two o'clock this afternoon

WS: Ok

BOPS: What they want to do is, I think they tried to screw us over totally and get us trying to fly when all of the transients in the world are tryin' to get in here.

WS: Right

BOPS: (Laughter) But anyway that's, that's the game plan right now, two o'clock.

WS: All right Sir

BOPS: So talk to you later

WS: Thanks

BOPS: Thanks

WS: Bye



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 92D AIR REFUELING WING (AMC)
FAIRCHILD AIR FORCE BASE, WASHINGTON

11 July 94

TRANSCRIPT #5

- (1) Subject: H/B52 Mishap
- (2) Identity of The Recording Facility: Fairchild Tower (SKA)
- (3) Facilities and Controller Positions and Abbreviations:
 - Watch Supervisor (WS)
 - Spokane Watch Supervisor (GEG WS)
 - Spokane Tower (GEGT)
 - Spokane Approach (GEG APP)
 - Flight Data (FD)
- (4) Position Being Recorder: Position #4 (WS)
- (5) Date and Time covered by the Transcript: 24 Jun 94 2050:00-2117:30
- (6) Source of Time Entries: DIGI Time with Auto Search
- (7) To avoid duplication, portions of this transcript are not transcribed because the controller working the position being transcribed is monitoring another position. Transmissions that appear to be omitted are actually transcribed in the appropriate position.
- (8) Certification: "As custodian of the original recording, I certify this to be a true and exact transcript."


CAROLYN J. HEYDT, Capt, USAF
Commander, Airfield Operations Flight

2050:00-No Transmissions

2051:00-No Transmissions

2052:00-No Transmissions

2052:28

GEG TWR: Fairchild Tower, Spokane Tower

GEG APP: Fairchild, Approach

LC: Tower (speaking to GEG TWR)

WS: Go ahead (Speaking to GEG APP)

GEG APP: Would like to go through the north side of your airspace with that seven three bravo there, about two north of Geiger

WS: Yeah, sure

GEG APP: Thanks

WS: Delta Whiskey

2053:00-No Transmissions

2054:00-No Transmissions

2054:09

WS: Line clear

GEG APP: Approach

WS: Yeah, Fairchild Tower, request release Class C for CZAR Five Two Heavy *** and EARL Zero One Heavy

GEG APP: Ok I will call you back

WS: Delta Whiskey

2055:00-No Transmissions

2055:49

WS: Fairchild Tower

GEG WS: Yeah this, uh, the supervisor over here

WS: Okay

GEG WS: Er, uhh, reference BLADE One Three there, uh, we're not gonna, uhh, run him in on the approach with these other guys goin'

WS: Right, right, that's fine

GEG WS: You want us to hold him 'til...

WS: Yeah

2056:00

WS: Hold him and tell him why he's holding out, I've already talked to the aircraft commander and told him this was a possibility *** yah, cause they pack these guys so close together on their practices here

GEG WS: Ok, we've got another guy off there, just, uh, west of ya anyway, we can't let him go at this moment so you want to let us, uh, run that BLADE in on a short turn-on?

2056:18

WS: Uh, naw, I'd rather have ya hold him out, really, uhh, who you talking bout, seven three zero?

GEG WS: Yeah

WS: Mmm kay, and he's west bound

GEG WS: Yeah, he's west bound

WS: Ok, now you know CZAR Five Two on this when he initially departs is gonna do a left three-sixty around our Tower here, over the South Training Area, remaining with...

GEG WS: Ok left turn drop back

WS: Right remaining within like a half a mile of our runway

GEG WS: Ok yeah we're... we didn't know exactly how close he, huh

WS: Yeah, we've already told him that

GEG WS: Ok

WS: I told him that when he called me this morning, he's gonna keep it pretty tight, cause ya know that, that conflicts with your traffic pattern

GEG WS: Ok but then he's gonna come back on a two three head, zero...

WS: Right then he'll be commin' off runway heading, he, he, uh...

GEG WS: Yeah, and the tanker...

WS: Right, do you want us to keep 'em on our frequency while he's doin' that?

GEG WS: Is he gonna remain within five miles or so?

2057:00

WS: Pretty close, he said he was gonna go to about three and that the tanker is gonna go to about six

GEG WS: Ok, just a minute

WS: Ok ***

GEG WS: ***Just a minute

WS: Mm kay

GEG WS: Ok, uh, ya, you don't have any problem with that seven three zero and seven three Bravo out there to the southwest, (unreadable) the Buff's released then

WS: Uh, ok, and do you, we're gonna have him...

2058:00

WS: ...monitor your frequency three eight four nine just in case you have ta give him a pop up traffic advisory

GEG WS: Ok

WS: All right

GEG WS: But you will be talkin' to him (unreadable)

WS: That's affirmative

GEG WS: Ok we'll take the point out on him then

WS: All right, sir

GEG WS: Dee Kay

WS: Delta Whiskey

2059:00-No Transmissions

2100:00-No Transmissions

2102:00-No Transmissions

2102:16

WS: Line clear *** (unreadable)

GEG APP: Approach

WS: Okay, uh, CZAR Five Two?

GEG WS: Yep

WS: Commin' off the, uh, first tear drop, he's on his second teardrop now to two three lookin' for a max climb to one two thousand ***

GEG APP: Yep, go ahead

WS: Thank you, Delta Whiskey, and he'll be commin' to you after this one

GEG APP: That's fine D-K

2103:00

2103:12

WS: Line clear

GEG APP: Approach

WS: Okay, and, uh, EARL will be following CZAR Five Two as a flight, both goin' to twelve

GEG APP: The splat there

WS: Both climbing to twelve with yer approval

GEG APP: Yeah, uh, that's approved and, oh...

WS: Ok

GEG WS: Confirm that CZAR Five Two is the splat there

WS: Heh, heh, heh, yeah, he's the one turning base right now

GEG APP: Ok, Dee Kay

WS: Delta Whiskey

2104:00-No Transmissions

2105:00-No Transmissions

2106:00-No Transmissions

2106:40

GEG APP: Fairchild Tower, Spokane Approach

WS: Go ahead

GEG APP: Yeah, we got a PINTO Two One, C-130, he's 'bout, uh, thirty-five to the south, uh, west there. Do you want us to hold him out, er, how long till these guys are through?

WS: Ok, my understanding was this will be their last teardrops to runway five, after this they'll make one teardrop to two three and then normal departure back to you, so they should be able...

2107:00

WS: ...to just come in bound

GEG APP: OK, one teardrop to, uh, two three after this, or...

WS: Right, right off of this approach, in other words he's gonna do a, basically a circling to two three...

GEG APP: Ok, both aircraft's...

WS: With both aircraft's, uh, then come back to you, uh, then they're done with their stuff

GEG APP: Ok, do you know what they're gonna want when they come back to us?

WS: Uh, just normal pattern work

GEG APP: Ok, thanks, Dec Kay

GEG APP: Yep, Delta Whiskey

2108:00-No Transmissions

2109:00-No Transmissions

2110:00-No Transmissions

2111:00-No Transmissions

2111:15

GEG APP: Tower, Approach

WS: Go ahead

GEG APP: Yeh, reference, uh, CZAR and EARL there, you can release that BLADE One Three to, uh, Felts Field

WS: Ok, thank you

GEG APP: Was, was he just goin' to Felts, or is he gonna do his parachute drop thing?

WS: Na, well he's just gonna go over to Felts and get out of the airspace for a little while

GEG APP: Ah, ok

WS: So, so these guys can finish up, then he'll probably be back over in a little bit to do his para drops.

GEG APP: Okay

WS: All right sir, Delta Whiskey

2112:00

2112:03

GEG APP: Ok, eh, they're gonna maintain at or below five, is that correct?

FD: Affirmative, ahh

GEG APP: That's for approaches right?

WS: No, they're, uh, I think they're gonna, er, stay with us the remainder of the time, standard traffic

GEG APP: They're gonna stay with you, then?

WS: That's what it sounds like

GEG APP: Okay

WS: EARL's only gonna do one more approach too, then he's full stoppin' and I think CZAR Five Two is gonna stay with us, standard traffic

GEG APP: Okay

WS: Standard traffic

GEG APP: When we get that PINTO, then we'll just run him in, he's a gonna be a visual approach, er, correction, he's VFR

WS: Okay

GEG APP: Just run him in for downwind there for runway two three, then

WS: To two three, affirmative

GEG APP: Okay

WS: Delta, uh, and thank you very much for you guys' help

GEG APP: Sure

WS: Delta Whiskey

2113:00

2113:46

GEG APP: Tower, Approach

WS: Go ahead

GEG APP: PINTO, uh, Two One has, uh, both the, uh, Buff and the tanker in sight, uh, we'll just send him to you and you can call his base leg.

WS: Ok, sir dat'l work, thank you very much

2114:00

2114:18

GEG APP: Spokane

WS: Ok, PINTO, or excuse me, BLADE One Three is commin' to ya now, just wants to go to Hayford,, hold there till these guys are done, then he's gonna back and pick up the jumpers

GEG APP: He wants to go where?

WS: To Hayford...just hold at Hayford drop zone

GEG APP: Okay

WS: Ok sir? Delta Whiskey

2115:00-No Transmissions

2116:00-No Transmissions

2116:18

WS: Tower, Tower

GEGT: Tower

WS: Ok, I got a B-Fifty Two executing a left closed and he's staying within about a quarter of a mile of the runway

GEGT: Ok, my airspace is yours

WS: All right, Delta Whiskey

2117:00-No Transmissions

2117:30-No Transmissions, only phone rings



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 92D AIR REFUELING WING (AMC)
FAIRCHILD AIR FORCE BASE, WASHINGTON

11 July 1994

TRANSCRIPT #6

- (1) Subject: H/B52 Mishap
- (2) Identity of The Recording Facility: Fairchild Tower (SKA)
- (3) Facilities and Controller Positions and Abbreviations:
 - Flight Data (FD)
 - Base Ops (BOPS)
 - Central Security Control (CSC)
 - Watch Supervisor (WS)
 - Spokane Approach (GEG APP)
 - Fire Department (CRASH)
- (4) Position Being Recorded: Position #3 (FD)
- (5) Date and Time Covered by The Transcript: 24 June 94 2058:00-2117:30
- (6) Source of time Entries: DIGI Time with Auto Search
- (7) To avoid duplication, portions of this transcript are not transcribed because the controller working the position being transcribed is monitoring another position. Transmissions that appear to be omitted are actually transcribed in the appropriate position.
- (8) Certification: "As custodian of the original recording, I certify this to be a true and exact transcript."


CAROLYN J. HEYDT/Capt, USAF
Commander, Airfield Operations Flight

2058:00-No Transmissions (Dialing Sounds)

2058:51-

CSC: Sgt Black

FD: Yeah hey let the guys in the W-S-A know that the bomber is doin' his thing now

CSC: Okay

FD: All right, R-K

2059:00-No Transmissions

2100:00-No Transmissions

2101:00-No Transmissions

2102:00-No Transmissions

2103:00-No Transmissions

2104:00-No Transmissions

2105:00-No Transmissions

2106:00-No Transmissions

2106:21

BOPS: Ops

FD: Yeah, hey we got, uh, two departure, at five eight with, er... CZAR Five Two with EARL Zero One

BOPS: Thank you, M-E

FD: I'm just callin' in now, R-K

BOPS: And I have an inbound

FD: Go ahead

BOPS: Moose One

FD: Moose?

BOPS: Moose

FD: What is it?

BOPS: F- Five, Twenty-One (unreadable) Three

FD: Twenty what?

BOPS: Forty-Three, Twenty-One Forty-Three

FD: Thank you

BOPS: You're welcome

FD: R-K

BOPS: M-E

2107:00-No Transmissions

2108:00-No Transmissions

2109:00-No Transmissions

2110:00-No Transmissions

2110:02

FD: Line Clear

GEG APP: Approach

FD: Fairchild, BLADE One Three would like to go, uh, on his Class C Departure to Felts Field, can I get a clearance, can I just get a heading for him?

GEG APP: Ahh, ok, uh, reference your...

FD: We'd like to go east if we could

GEG APP: Well

FD: Or northeast

GEG APP: Let, let me call you right back

FD: R-K

2111:00 See Transcript #5

FD: Approach, Fairchild

GEG APP: Approach

FD: Yeah, BLADE One Three, is he released northeast bound?

GEG APP: Affirmative

FD: R-K

GEG APP: He is released and, uh, BLADE, or, correction, CZAR Five Two and, uh, EARL Zero One

2112:00

FD: Affirmative

GEG APP: Ok, uh, they're gonna maintain at or below five is that correct?

FD: Affirmative

GEG APP: Comm in off, that's for approaches right?

WS: No they're, I think they're gonna stay with us the remainder of the time, standard traffic

GEG APP: They're gonna stay with you then?

WS: That's what it sounds like, EARL's only gonna do (cut off) see Transcript #5

2113:00-No Transmissions

2114:00-No Transmissions

2114:01

FD: Tower

CRASH: Fairchild Tower, Seven, permission to your cross active, Delta

FD: Engine Seven, hold short

Crash: Seven's holding short

2115:00-No Transmissions

2116:00-No Transmissions

2116:30-Sec Transcript #7



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 92D AIR REFUELING WING (AMC)
FAIRCHILD AIR FORCE BASE, WASHINGTON

11 July 1994

TRANSCRIPT #7

- (1) Subject: H/B52 Mishap
- (2) Identity of The Recording Facility: Fairchild Tower (SKA)
- (3) Facilities and Controller Positions and Abbreviations:
 - Flight Data (FD)
 - Fire Department (Crash)
 - Base Ops (BOPS)
 - Hospital (H)
- (4) Position Being Recorded: Crash Phone #2
- (5) Date and Time Covered by The Transcript: 24 Jun 94 2116:30-2118:00
- (6) Source of time Entries: DIGI Time With Auto Search
- (7) To avoid duplication, portions of this transcript are not transcribed because the controller working the position being transcribed is monitoring another position. Transmissions that appear to be omitted are actually transcribed in the appropriate position.
- (8) Certification: "As custodian of the original recording, I certify this to be a true and exact transcript."


CAROLYN J. HEYDT, Capt, USAF
Commander, Airfield Operations Flight

2116:00

2116:35

FD: This is Fairchild Tower with a...this is Fairchild Tower with a crash...uh...Fairchild Tower with a ground emergency, type aircraft Heavy B Fifty-Two, call sign: CZAR Five Two...nature of the Emergency: the aircraft is on the ground...Location: approximately, uh, two thousand feet behind the Tower right next to the W-S-A...runway two three in use...persons on board, unknown...fuel, no...unknown... no dangerous cargo...wind direction, uh, two zero, two one zero at one one...uh, any questions crash?

2117:26

CRASH: No, no questions

FD: No questions, any questions Base Ops?

BOPS: Negative, XRAY, XRAY

FD: Any questions hospital?

H: What is wrong with the aircraft?

FD: The aircraft has crashed approximately 2000 feet behind the Tower

H: Okay

FD: Any questions?

H: No, no questions

FD: R-K, R-K in the Tower secure the net.

2

USAF AIRCRAFT ACCIDENT INVESTIGATION REPORT INDEX TAB FORM

A AF FORM 711 - USAF MISHAP REPORT
C AF FORM 711b - AIRCRAFT MISHAP REPORT
D AF FORM 711c - AIRCRAFT MAINTENANCE AND MATERIAL REPORT
G FLIGHT AND PERSONNEL RECORDS
H AFTO FORMS 781
I MATERIAL DEFICIENCY REPORTS
J TECHNICAL AND ENGINEERING EVALUATIONS OF MATERIAL (DOD)
K DD FORM 175, MILITARY FLIGHT PLAN
L DD FORM 365F, WEIGHT AND BALANCE CLEARANCE FORM F - TACTICAL
M CERTIFICATE OF DAMAGE
N TRANSCRIPTS OF RECORDED COMMUNICATIONS
O ANY ADDITIONAL SUBSTANTIATING DATA REPORTS
Q ORDERS APPOINTING INVESTIGATING BOARD
R DIAGRAMS (FALLOUT-IMPACT AREA)
S PHOTOGRAPHS
T INDIVIDUAL FLIGHT RECORDS
V TESTIMONY AND STATEMENTS OF WITNESSES
W WEATHER OBSERVATIONS
X STATEMENTS OF INJURY OR DEATH
Y DOCUMENTS APPOINTING ACCIDENT INVESTIGATION BOARD
Z PHOTOGRAPHS NOT INCLUDED IN PART I OF SAFETY REPORT
AA SUPPORTING ADDITIONAL DATA

TAB O INDEX

1. **Preliminary Assessment Of Government Damage**
2. **Labatory Results Of Maintenance Fluid Samples**
3. **Soil Composition Report**



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 92D SUPPORT GROUP (ACC)
FAIRCHILD AIR FORCE BASE, WASHINGTON

14 July 1994

MEMORANDUM FOR 92 BW/SIB

FROM: 92 CES/CEO

SUBJECT: Estimate for Government Property Damage on Fairchild AFB as a Result of the B-52 Crash

1. The attached estimate is for damage found at the South Substation as a result of the B-52 crash on 24 June 1994. It should be noted that the South Substation has not yet been energized since the crash. We have done extensive testing of major pieces of the substation; however it is very difficult to know if the substation has damage that cannot be found through testing. After the substation is energized we will know the complete situation. This cost estimate does not take into account any damage that might be found after the substation is energized.

2. Direct any questions to Rex Belleville, 92 CES/CEOE, ext. 75468.

IRVIN B. LEE, Major, USAF
Chief, Operations Flight

1 Attachment:
Cost Estimate

Intended For: (C)
Author: Scott D. Whittaker
Subject: Estm Enviro Cost B-52

This Item is in Progress

Listed are the estimated environmental cleanup cost associated with the B-52 crash on 24 June 94. The estimate is purely speculative because the extent, amount, and type of hazard has not been identified. Previous crash site have revealed that very little of the crash debris results in a hazardous waste. Assuming that some fuel contaminated soils exist, disposal cost is \$65/Ton, estm. 30 tons and \$1950. Sampling cost is estm. at \$1350/sample 20 samples or \$27,000. other hazardous waste disposal cost is estimated at \$750/55 gal drum and 40 drums or \$30,000. Total estimated cost would be about \$58,950. This is only an estimate, and only addresses disposal and sampling cost, no labor, monitoring, or supply cost are factored into this estimate.

CONSTRUCTION COST ESTIMATE BREAKDOWN

OMB No. 0704-0193
Expires 31 October 1989

CONTRACTOR

ADDRESS

CONTRACT FOR (Work to be performed)

REPAIR DAMAGE AT CRASH SITE

PROPOSED TOTAL CONTRACT PRICE

PURCHASE REQUEST NUMBER

PROJECT NUMBER

WORK LOCATION

SOUTH SUBSTATION

LINE NO.	ITEM	UNIT OF MEASURE	QUANTITY	MATERIAL COST		MANHOURS MANDAYS	LABOR COSTS		OTHER DIRECT COSTS	LINE TOT (10)
				UNIT	TOTAL		AVERAGE RATE	TOTAL		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)		
1	AREA LIGHT & POLE NE CORNER	EA	1	1100 ⁰⁰	6 HRS	27.50	165			1165 ⁰⁰
2	AREA LIGHT BUILDING NE SIDE	EA	1	240 ⁰⁰	2 HRS	27.50	55 ⁰⁰			295 ⁰⁰
3	FENCE, PERIMETER	EA	1							4537
4	RELAY HOUSE CLEANING & PAINTING	EA	1							1800 ⁰⁰
5	XFMR CLEANING & PAINTING	EA	1							1000 ⁰⁰
6	4 UTILITY POLES 45'	EA	4	2180 ⁰⁰	48	27.5	1320 ⁰⁰			3500 ⁰⁰
7	1 UTILITY POLES 65'	EA	1	1500 ⁰⁰	16	27.5	440 ⁰⁰			1940 ⁰⁰
8	CROSSARMS & HARDWARE	EA	4	480 ⁰⁰	14	27.5	385 ⁰⁰			865 ⁰⁰
9	LIGHTNING ARRESTORS	EA	3	1260 ⁰⁰	11	27.5	300			660 ⁰⁰

INSTRUCTIONS FOR COMPLETING AF FORM 3052

Col 1 Item. Description of materials required, work to be done, special equipment needed, etc. Breakdown should be in sufficient detail to permit itemizing of all direct costs.

Col 2 Unit of Measure. Description of the unit in which each item is to be estimated (examples—square yards—SY, cubic yards—CY, square feet—SF, linear feet—LF, board feet—BF, each—EA, pound—LB).

Col 3 Quantity. Contractor's estimate of quantity required in terms of unit of measure (column 2). Items and units of measure will be furnished by the Government. Quantity estimates will be furnished by the Government only when it is anticipated that a unit price contract will be issued. Otherwise, the contractor is responsible for determining quantity estimates.

Col 4 and 5 Material Costs. Enter unit cost (Col 4) of material to be supplied and total cost (col 5) for item listed in column 1.

Col 6, 7 and 8 Labor Costs. Enter in col 6 the estimated number of manhours or mandays needed to perform the work listed in column 1. Enter in col 7 the average rate per manhour (manday) and in col 8 the total labor cost.

Col 9 Other Direct Costs. Enter estimated costs of special equipment and other items (listed in column 1) which are special to the contract and of significant dollar value.

Col 10 Line Total. Self-explanatory.

NOTE: In addition to other totals entered on various pages, the grand total of column 10, plus overhead and profit will be shown on the last page as follows.

TOTAL MATERIAL COSTS \$ _____

TOTAL LABOR COSTS \$ _____

TOTAL OTHER DIRECT COSTS \$ _____

TOTAL DIRECT COSTS \$ _____

OVERHEAD _____ % \$ _____

SUBTOTAL \$ _____

PROFIT _____ % \$ _____

TOTAL PRICE \$ _____

DATE _____

FIRM NAME _____

TITLE _____

BY _____ (Signature)

INSTRUCTIONS TO OFFERORS

1. The purpose of this form is to provide a standard format by which the offeror submits to the Government a summary of incurred and estimated costs (and attached supporting information) suitable for detailed review and analysis. Prior to the award of a contract resulting from this proposal the offeror shall, under the conditions stated in ASPR 3-807.3, be required to submit a certificate of current cost or pricing data (see ASPR 3-807.3(e) and 3-807.4).

2. In addition to the specific information required by this form, the offeror is expected, in good faith, to incorporate in and submit with this form any additional data, supporting schedules, or substantiation which are reasonably required for the conduct of an appropriate review and analysis in the light of the specific facts of this procurement. For effective negotiations, it is essential that there be a clear understanding of

- The existing, verifiable data.
- The judgmental factors applied in projecting from known data to the estimate, and
- The contingencies used by the offeror in his proposed price.

In short, the offeror's estimating process itself needs to be disclosed.

3. When attachment of supporting cost or pricing data to this form is impracticable, the data will be described (with schedules as appropriate), and made available to the contracting officer or his authorized representative upon request.

4. By submission of this proposal the offeror grants to the contracting officer, or his authorized representative, the right to examine, for the purpose of verifying the cost or pricing data submitted, those books, records, documents and other supporting data which will permit adequate evaluation of such cost or pricing data, along with the computations and projections used therein. This right may be exercised in connection with any negotiations prior to contract award.

OMB No. 0704-0193
Expires 31 October 1993

CONTRACTOR

ADDRESS

CONTRACT FOR (Work to be performed)

PROPOSED TOTAL CONTRACT PRICE

PURCHASE REQUEST NUMBER

PROJECT NUMBER

WORK LOCATION[illegible]

INSTRUCTIONS FOR COMPLETING AF FORM 3052

Col 1 Item. Description of materials required, work to be done, special equipment needed, etc. Breakdown should be in sufficient detail to permit itemizing of all direct costs.

Col 2 Unit of Measure. Description of the unit in which each item is to be estimated (examples--square yards--SY, cubic yards--CY, square feet--SF, linear feet--LF, board feet--BF, each--EA, pound--LB).

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Col 9 Other Direct Costs. Enter estimated costs of special equipment and other items (listed in column 1) which are special to the contract and of significant dollar value.

Col 10 Line Total. Self-explanatory.

NOTE: In addition to other totals entered on various pages, the grand total of column 10, plus overhead and profit will be shown on the last page as follows.

TOTAL MATERIAL COSTS \$ _____

TOTAL LABOR COSTS \$ _____

TOTAL OTHER DIRECT COSTS \$ _____

TOTAL DIRECT COSTS \$ 91,426

OVERHEAD 15 % \$ 13,714

SUBTOTAL \$ _____

PROFIT 10 % \$ 9,143

TOTAL PRICE \$ 114,283

DATE 14 JULY 1994

FIRM NAME FAIRCHILD AFB

TITLE ELECTRICAL ENGINEER

[Signature]
(Signature)

INSTRUCTIONS TO OFFERORS

1. The purpose of this form is to provide a standard format by which the offeror submits to the Government a summary of incurred and estimated costs (and attached supporting information) suitable for detailed review and analysis. Prior to the award of a contract resulting from this proposal the offeror shall, under the conditions stated in ASPR 3-807.3, be required to submit a certificate of current cost or pricing data (see ASPR 3-807.3(e) and 3-807.4).

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- The existing, verifiable data.
- The judgmental factors applied in projecting from known data to the estimate, and
- The contingencies used by the offeror in his proposed price.

In short, the offeror's estimating process itself needs to be disclosed.

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AIRCRAFT 61-026 CRASH SITE

FLUID COLLECTION DATA

Sample #1: Engine driven hydraulic pump #1272
- 84 inches due south from power box B424 on northern end of site

Sample #2: Fuel control JFC2514
- 75 inches north east of power box B424
- Part power stopped
- Sample taken from a severed fuel tube in the vertical position

Sample #3: Fuel transmitter, serial number AF-60-T-12087
- 54 inches southwest from power pole fl, 9 north end of site

Sample #4: Hydraulic reservoir
- Due east of power box B424

NOTE: All engine oil reservoirs appear to be empty, no oil sample collected

Fluid Samples From Servicing Carts

1. Hydraulic Service Cart #1
2. Hydraulic Service Cart #2
3. Hydraulic Service Cart #4
4. Hydraulic Service Cart #5
5. Hydraulic Service Cart #6
6. Oil Service Cart #1
7. Oil Service Cart #2
8. Fuel Truck 91L-55
9. LOX Storage Tank #104
10. LOX Service Cart #10

Submitter's Sample No: 40-2035

Lab Report No: 94-F-1607

Contract No:
Batch/Lot No:
NSN: 9130-
Quantity Represented: 6000
Reason Submitted: Aircraft Crash/Incident

USAF Aerospace Fuels Laboratory
Det 35, SA-ALC/SFTLD
10 Park Ave C Bldg 1
Mukilteo WA 98275-1618

Submitted by:

92 SUPS/LGSF
FAIRCHILD AFB WA 99011-5000

Date Reported: 30Jun94
Date Received: 30Jun94
Date Sampled: 24JUNE94
Date Manufactured:
Origin: 91L-55
Product: Aviation Turbine Fuel
Specification: MIL-T-5624 JP4

METHOD	TEST	SPEC LIMITS		LAB
		MIN	MAX	RESULTS
MIL-T-5624	Workmanship		Pass	Pass
D156	Color, Saybolt		Report	26
D3242	Total Acid Number, mg KOH/g		0.015	0.009
D1319	Aromatics, %vol		25.0	12.2
D1319	Olefins, %vol		5.0	0.5
D3227	Mercaptan Sulfur, %wt		0.002	0.000
D4294	Total Sulfur, %wt		0.40	0.03
D2887	Distillation IBP, °C		Report	15
	10%		Report	84
	20%		130	100
	50%		185	145
	90%		250	220
	95%		Report	237
	EP		320	272
D1298	Gravity, API	45.0	57.0	54.6
D323	Vapor Pressure, psi	2.0	3.0	2.3
D2386	Freezing Point, °C		-58	-66
D3338	Heat of Combustion, BTU/lb	18400		18734
D3343	Hydrogen Content, %wt	13.5		14.4
D1322	Smoke Point, mm	20.0		27.0
D130	Copper Corrosion		1	1a
D3241	Thermal Stability			
	Tube Rating; Visual		<3	1
	Change in Press., mm of Hg		25	0
D381	Existent Gum, mg/100ml		7.0	0.2
D2276	Particulate Matter, mg/l		1.0	0.2
D2276	Filtration Time, minutes		10	4
D1094	Water Reaction		1B	1
D5006	FSII, %vol	0.10	0.15	0.12
D2624	Conductivity, pS/m	150	600	217
GC	Gas Chromatography Scan		Report	See Below

PAGE 2

Submitter's Sample Number
40-2035

Date
30Jun94

Lab Report Number
94-F-1607

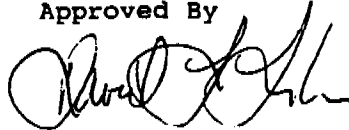
REMARKS:

GC Scan: No Detectable Contamination.

Material represented by this sample meets specification limits.

Reference telefax of test report to 92 SUPS/LGSF, Accident Investigation Team on
30 JUN 94.

Approved By



DAVID L. FISHER

Chief, Aerospace Fuels Laboratory
Directorate of Aerospace Fuels

Submitter's Sample No: 02074

Lab Report No: 94-F-1009

Contract No:
Batch/Lot No:
NSN: 9130-00-256-8613
Quantity Represented:
Reason Submitted: Aircraft Crash/Incident

USAF Aerospace Fuels Laboratory
Det 35, SA-ALC/SFTLD
10 Park Ave C Bldg 1
Mukilteo WA 98275-1618

Submitted by:

92 SUPS/LGSF
FAIRCHILD AFB WA 99011-5000

Date Reported: 30Jun94
Date Received: 30Jun94
Date Sampled:
Date Manufactured:
Origin: FLOW TRANSMITTE
Product: Aviation Turbine Fuel
Specification: MIL-T-5624 JP4

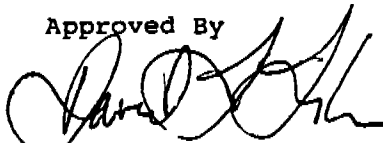
METHOD	TEST	SPEC LIMITS		LAB RESULTS
		MIN	MAX	
D2887	Distillation IBP, °C		Report	42
	10%		Report	84
	20%		130	111
	50%		185	152
	90%		250	224
	95%		Report	240
	EP		320	285
GC	Gas Chromatography Scan		Report	See Below

REMARKS:

GC Scan: No Detectable Contamination.

Reference telefax of test report to 92 SUPS/LGSF, Accident Investigation Team on 30 JUN 94.

Approved By



DAVID L. FISHER
Chief, Aerospace Fuels Laboratory
Directorate of Aerospace Fuels

Submitter's Sample No: 402075

Lab Report No: 94-F-1010

Contract No:
Batch/Lot No:
NSN: 9130-00-256-8613
Quantity Represented:
Reason Submitted: Aircraft Crash/Incident

USAF Aerospace Fuels Laboratory
Det 35, SA-ALC/SFTLD
10 Park Ave C Bldg 1
Mukilteo WA 98275-1618

Submitted by:

92 SUPS/LGSF
FAIRCHILD AFB WA 99011-5000

Date Reported: 30Jun94
Date Received: 30Jun94
Date Sampled:
Date Manufactured:
Origin: FUEL CONTROL VA
Product: Aviation Turbine Fuel
Specification: MIL-T-5624 JP4

METHOD	TEST	SPEC LIMITS		LAB RESULTS
		MIN	MAX	
D2887	Distillation IBP , °C		Report	95
	10%		Report	135
	20%		130	151 ##
	50%		185	184
	90%		250	239
	95%		Report	252
	EP		320	292
GC	Gas Chromatography Scan		Report	See Below

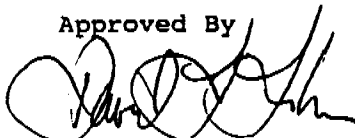
REMARKS:

GC Scan: No Detectable Contamination.

Material represented by this sample does not meet specification limit for Distillation 20% Point. This is typical of fuel exposed to high heat/fire. Light distillate material in fuels will evaporate under these conditions showing higher than normal values for low-medium range distillation points.

Reference telefax of test report to 92 SUPS/LGSF, Accident Investigation Team on 30 JUN 94.

Approved By



DAVID L. FISHER
Chief, Aerospace Fuels Laboratory
Directorate of Aerospace Fuels

Submitter's Sample No: 402067

Lab Report No: 94-I-1611

Contract No:

Batch/Lot No:

NSN: -

Quantity Represented:

Reason Submitted: CRASH SAMPLE

USAF Aerospace Fuels Laboratory

Det 35, SA-ALC/SFTLD

10 Park Ave C Bldg 1

Mukilteo WA 98275-1618

Submitted by:

92 SUPS/LGSF

FAIRCHILD AFB WA 99011-5000

Date Reported: 1Jul94

Date Received: 30Jun94

Date Sampled:

Date Manufactured:

Origin: CART# 1

Product: Hydraulic Fluid, Petroleum Base

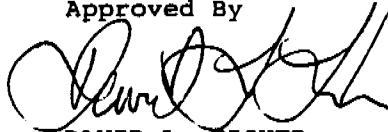
Specification: Mil-H-5606

GC SCAN: No Detectable Contamination

REMARKS:

Reference telefax of test report to 92 SUPS/LGSF, Accident Investigation Team on 01 JUL 94.

Approved By



DAVID L. FISHER

Chief, Aerospace Fuels Laboratory

Directorate of Aerospace Fuels

Submitter's Sample No: 402068

Lab Report No: 94-I-1612

Contract No:
Batch/Lot No:
NSN: -
Quantity Represented:
Reason Submitted: A/C CRASH

USAF Aerospace Fuels Laboratory
Det 35, SA-ALC/SFTLD
10 Park Ave C Bldg 1
Mukilteo WA 98275-1618

Submitted by:

92 SUPS/LGSF
FAIRCHILD AFB WA 99011-5000

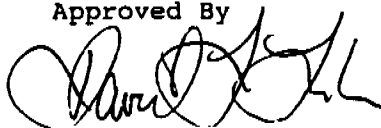
Date Reported: 1Jul94
Date Received: 30Jun94
Date Sampled:
Date Manufactured:
Origin: CART # 2
Product: Hydraulic Fluid, Petroleum Base
Specification: Mil-H-5606

GC SCAN: No Detectable Contamination

REMARKS:

Reference telefax of test report to 92 SUPS/LGSF, Accident Investigation Team on 01 JUL 94.

Approved By



DAVID L. FISHER
Chief, Aerospace Fuels Laboratory
Directorate of Aerospace Fuels

Submitter's Sample No: 402069

Lab Report No: 94-I-1613

Contract No:
Batch/Lot No:
NSN: -
Quantity Represented:
Reason Submitted: A/C CRASH

USAF Aerospace Fuels Laboratory
Det 35, SA-ALC/SFTLD
10 Park Ave C Bldg 1
Mukilteo WA 98275-1618

Submitted by:

92 SUPS/LGSF
FAIRCHILD AFB WA 99011-5000

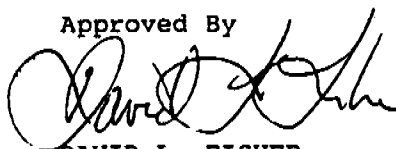
Date Reported: 1Jul94
Date Received: 30Jun94
Date Sampled:
Date Manufactured:
Origin: CART # 4
Product: Hydraulic Fluid, Petroleum Base
Specification: Mil-H-5606

GC SCAN: No Detectable Contamination

REMARKS:

Reference telefax of test report to 92 SUPS/LGSF, Accident Investigation Team on 01 JUL 94.

Approved By



DAVID L. FISHER
Chief, Aerospace Fuels Laboratory
Directorate of Aerospace Fuels

Submitter's Sample No: 402070

Lab Report No: 94-I-1614

Contract No:
Batch/Lot No:
NSN: -
Quantity Represented:
Reason Submitted: A/C CRASH

USAF Aerospace Fuels Laboratory
Det 35, SA-ALC/SFTLD
10 Park Ave C Bldg 1
Mukilteo WA 98275-1618

Submitted by:

92 SUPS/LGSF
FAIRCHILD AFB WA 99011-5000

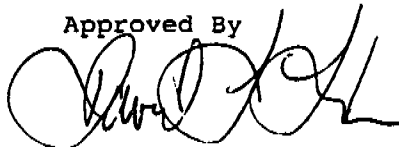
Date Reported: 1Jul94
Date Received: 30Jun94
Date Sampled:
Date Manufactured:
Origin: CART # 5
Product: Hydraulic Fluid, Petroleum Base
Specification: Mil-H-5606

GC SCAN: No Detectable Contamination

REMARKS:

Reference telefax of test report to 92 SUPS/LGSF, Accident Investigation Team on 01 JUL 94.

Approved By



DAVID L. FISHER
Chief, Aerospace Fuels Laboratory
Directorate of Aerospace Fuels

Submitter's Sample No: 402071

Lab Report No: 94-I-1615

Contract No:
Batch/Lot No:
NSN: -
Quantity Represented:
Reason Submitted: A/C CRASH

USAF Aerospace Fuels Laboratory
Det 35, SA-ALC/SFTLD
10 Park Ave C Bldg 1
Mukilteo WA 98275-1618

Submitted by:

92 SUPS/LGSF
FAIRCHILD AFB WA 99011-5000

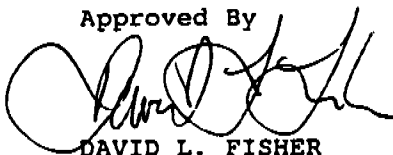
Date Reported: 1Jul94
Date Received: 30Jun94
Date Sampled:
Date Manufactured:
Origin: CART #6
Product: Hydraulic Fluid, Petroleum Base
Specification: Mil-H-5606

GC SCAN: No Detectable Contamination

REMARKS:

Reference telefax of test report to 92 SUPS/LGSF, Accident Investigation Team on 01 JUL 94.

Approved By



DAVID L. FISHER

Chief, Aerospace Fuels Laboratory
Directorate of Aerospace Fuels

Submitter's Sample No: 402073

Lab Report No: 94-I-1016

Contract No:
Batch/Lot No:
NSN: -
Quantity Represented:
Reason Submitted: A/C CRASH

USAF Aerospace Fuels Laboratory
Det 35, SA-ALC/SFTLD
10 Park Ave C Bldg 1
Mukilteo WA 98275-1618

Submitted by:

92 SUPS/LGSF
FAIRCHILD AFB WA 99011-5000

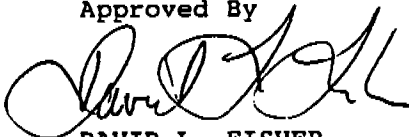
Date Reported: 1Jul94
Date Received: 30Jun94
Date Sampled:
Date Manufactured:
Origin: HYDRAULIC RES.
Product: Hydraulic Fluid, Petroleum Base
Specification: Mil-H-5606

GC SCAN: No Detectable Contamination

REMARKS:

Reference telefax of test report to 92 SUPS/LGSF, Accident Investigation Team on 01 JUL 94.

Approved By



DAVID L. FISHER
Chief, Aerospace Fuels Laboratory
Directorate of Aerospace Fuels

Submitter's Sample No: 402072

Lab Report No: 94-I-1517

Contract No:
Batch/Lot No:
NSN: -
Quantity Represented:
Reason Submitted: A/C CRASH

USAF Aerospace Fuels Laboratory
Det 35, SA-ALC/SFTLD
10 Park Ave C Bldg 1
Mukilteo WA 98275-1618

Submitted by:

92 SUPS/LGSF
FAIRCHILD AFB WA 99011-5000

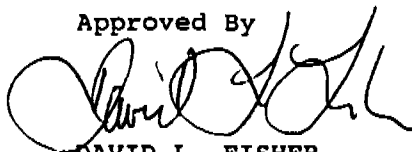
Date Reported: 1Jul94
Date Received: 30Jun94
Date Sampled:
Date Manufactured:
Origin: ENG. DRIVEN PUM
Product: Hydraulic Fluid, Petroleum Base
Specification: Mil-H-5606

GC SCAN: No Detectable Contamination

REMARKS:

Reference telefax of test report to 92 SUPS/LGSF, Accident Investigation Team on 01 JUL 94.

Approved By



DAVID L. FISHER
Chief, Aerospace Fuels Laboratory
Directorate of Aerospace Fuels

Submitter's Sample No: 02032

Lab Report No: 94-0-1-18

Source: LXCT 10
Last Addition Date: 06/24/94
Last Purging Date:
Contractor:

USAF Aerospace Fuels Laboratory
Det 35, SA-ALC/SFTLD
10 Park Ave C Bldg 1
Mukilteo, WA 98275-1618

AIRCO Industrial Gases
Vancouver WA

Reason Submitted: Crash Sample

Submitted by:

92 SUPS/LGSF
FAIRCHILD AFB WA 99011-5000

Date Reported: 30Jun94
Date Received: 30Jun94
Date Sampled: 06/24/94
Sampler No: 81A1386
Product: Oxygen, Aviator's Breathing, Liquid
Specification: TO 42B6-1-1 II

METHOD	TEST	USE LIMITS		LAB RESULTS
		MIN	MAX	
SPEC	Odor		NONE	None
SPEC	Purity, % by vol		REPORT	99.8
MIL-STD-1564	Carbon Dioxide, ppm by vol		10	0
	Methane, ppm by vol		50	23
	Acetylene		0.1	0.0
	Ethylene, ppm by vol		0.4	0.0
	C2+ hydrocarbons, ppm by vol		6	1
	Nitrous Oxide, ppm by vol		4	1
	Refrigerants(freons), ppm/vol		2	0
	Halogenated Solvents, ppm/vol		0.2	0.0
	Others, ppm by vol		0.2	0.0

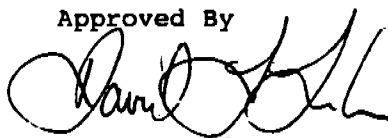
REMARKS:

Material represented by this sample meets TO requirements.

Reference telefax of test report to 92 SUPS/LGSF, Accident Investigation Team on 30 JUN 94.

Copy to SFTT

Approved By



DAVID L. FISHER

Chief, Aerospace Fuels Laboratory
Directorate of Aerospace Fuels

Submitter's Sample No: 02028

Lab Report No: 94-O-19

Source: LOX 104
Last Addition Date:
Last Purging Date: 10/21/93
Contractor:
AIRCO Industrial Gases
Vancouver WA
Reason Submitted: Crash Sample

USAF Aerospace Fuels Laboratory
Det 35, SA-ALC/SFTLD
10 Park Ave C Bldg 1
Mukilteo, WA 98275-1618

Submitted by:

92 SUPS/LGSF
FAIRCHILD AFB WA 99011-5000

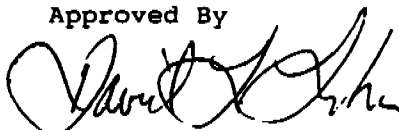
Date Reported: 30Jun94
Date Received: 30Jun94
Date Sampled: 06/24/94
Sampler No: 81A1499
Product: Oxygen, Aviator's Breathing, Liquid
Specification: TO 42B6-1-1 II

METHOD	TEST	USE LIMITS		LAB
		MIN	MAX	RESULTS
SPEC	Odor		NONE	None
SPEC	Purity, % by vol		REPORT	99.8
MIL-STD-1564	Carbon Dioxide, ppm by vol		10	0
	Methane, ppm by vol		50	15
	Acetylene		0.1	0.0
	Ethylene, ppm by vol		0.4	0.0
	C2+ hydrocarbons, ppm by vol		6	1
	Nitrous Oxide, ppm by vol		4	0
	Refrigerants(freons), ppm/vol		2	0
	Halogenated Solvents, ppm/vol		0.2	0.0
	Others, ppm by vol		0.2	0.0

REMARKS:

Material represented by this sample meets TO requirements.
Reference telefax of test report to 92 SUPS/LGSF, Accident Investigation Team on
30 JUN 94.
Copy to SFTT

Approved By



DAVID L. FISHER
Chief, Aerospace Fuels Laboratory
Directorate of Aerospace Fuels

Submitter's Sample No: 402077

Lab Report No: 94-I-1620

Contract No:
Batch/Lot No:
NSN: -
Quantity Represented:
Reason Submitted: A/C CRASH

USAF Aerospace Fuels Laboratory
Det 35, SA-ALC/SFTLD
10 Park Ave C Bldg 1
Mukilteo WA 98275-1618

Submitted by:

92 SUPS/LGSF
FAIRCHILD AFB WA 99011-5000

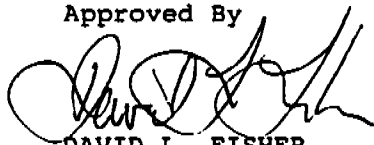
Date Reported: 1Jul94
Date Received: 30Jun94
Date Sampled:
Date Manufactured:
Origin: OIL CART #2
Product: Lubricating Oil, A/C turbine engine
Specification: Mil-L-7808

GC SCAN: No Detectable Contamination

REMARKS:

Reference telefax of test report to 92 SUPS/LGSF, Accident Investigation Team on 01 JUL 94.

Approved By



DAVID L. FISHER

Chief, Aerospace Fuels Laboratory
Directorate of Aerospace Fuels

Submitter's Sample No: 402076

Lab Report No. 94-I-1621

Contract No:
Batch/Lot No:
NSN: -
Quantity Represented:
Reason Submitted: A/C CRASH

USAF Aerospace Fuels Laboratory
Det 35, SA-ALC/SFTLD
10 Park Ave C Bldg 1
Mukilteo WA 98275-1618

Submitted by:

92 SUPS/LGSF
FAIRCHILD AFB WA 99011-5000

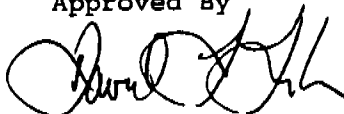
Date Reported: 1Jul94
Date Received: 30Jun94
Date Sampled:
Date Manufactured:
Origin: OIL CART # 1
Product: Lubricating Oil, A/C turbine engine
Specification: Mil-L-7808

GC SCAN: No Detectable Contamination

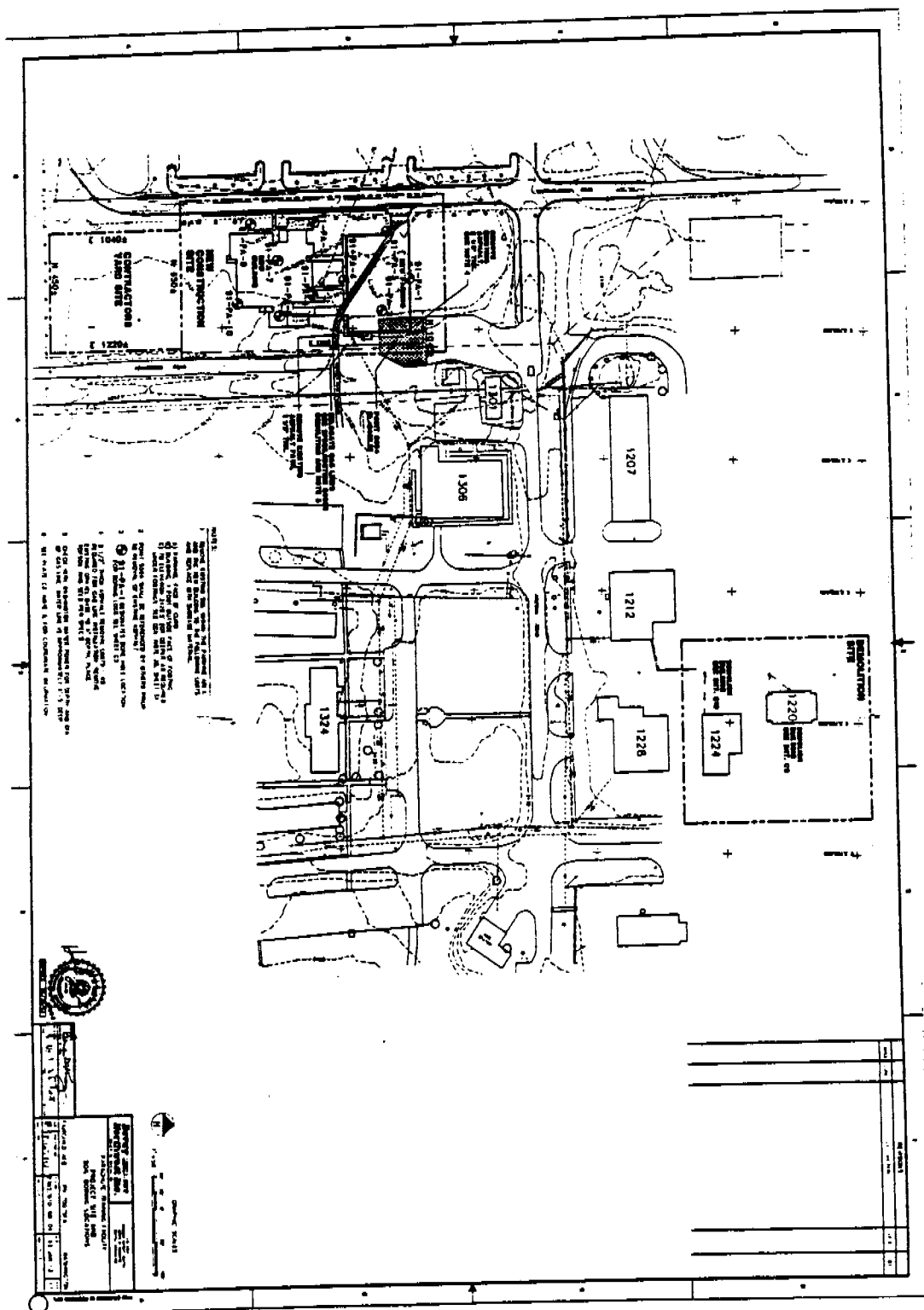
REMARKS:

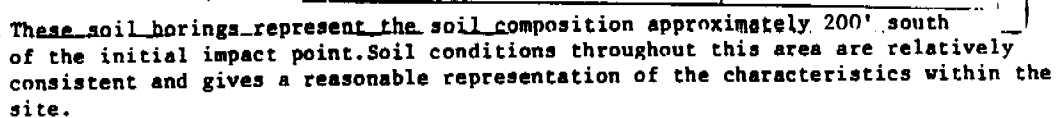
Reference telefax of test report to 92 SUPS/LGSF, Accident Investigation Team on 01 JUL 94.

Approved By



DAVID L. FISHER
Chief, Aerospace Fuels Laboratory
Directorate of Aerospace Fuels





USAF AIRCRAFT ACCIDENT INVESTIGATION REPORT INDEX TAB FORM

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C AF FORM 711b - AIRCRAFT MISHAP REPORT
D AF FORM 711c - AIRCRAFT MAINTENANCE AND MATERIAL REPORT
G FLIGHT AND PERSONNEL RECORDS
H AFTO FORMS 781
I MATERIAL DEFICIENCY REPORTS
J TECHNICAL AND ENGINEERING EVALUATIONS OF MATERIAL (DOD)
K DD FORM 175, MILITARY FLIGHT PLAN
L DD FORM 365F, WEIGHT AND BALANCE CLEARANCE FORM F - TACTICAL
M CERTIFICATE OF DAMAGE
N TRANSCRIPTS OF RECORDED COMMUNICATIONS
O ANY ADDITIONAL SUBSTANTIATING DATA REPORTS
Q ORDERS APPOINTING INVESTIGATING BOARD
R DIAGRAMS (FALLOUT-IMPACT AREA)
S PHOTOGRAPHS
T INDIVIDUAL FLIGHT RECORDS
V TESTIMONY AND STATEMENTS OF WITNESSES
W WEATHER OBSERVATIONS
X STATEMENTS OF INJURY OR DEATH
Y DOCUMENTS APPOINTING ACCIDENT INVESTIGATION BOARD
Z PHOTOGRAPHS NOT INCLUDED IN PART I OF SAFETY REPORT
AA SUPPORTING ADDITIONAL DATA

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS TWELFTH AIR FORCE (ACC)
DAVIS-MONTHAN AIR FORCE BASE, AZ 85707-4250

SPECIAL ORDER
M-007

28 June 1994

With the concurrence of the commanders concerned, the following individuals, organization indicated, are appointed as Safety Investigation Board members to investigate the Class A Flight Mishap, 92 BW, Fairchild AFB, WA, which occurred at Fairchild AFB, 24 Jun 94, involving a B-52H aircraft tail number 61-0026. Individuals are relieved from all duties pending completion of the investigation. Authority: AFR 127-4.

COL JOHN C. MOORE,
Board President

5 OG/CD
MINOT AFB, ND 58705

COL JOSEPH J. CONTIGUGLIA
Flight Surgeon Member

5 MG/SGP
MINOT AFB, ND 58705

LT COL JAMES A. BLACKWOOD II
Pilot Member

93 BW/SE
CASTLE AFB, CA 95342

LT COL MICHAEL E. MCCULLOUGH
Commander's Representative

92 BW/SE
FAIRCHILD AFB, WA 99011

MAJ RICHARD A. LANE
Maintenance Member

93 LSS/CC
CASTLE AFB, CA 95342

CAPT WILLIAM H. STIMPSON
Investigating Officer

DET 1, 2 OG,
BARKSDALE AFB, LA 71110

CAPT TIMOTHY M. MCNEIL
Life Support Member

93 OSS/OSAA
CASTLE AFB, CA 95342

CAPT MICHAEL D. SANDERS
Accident Recorder

92 MSSQ/MSI
FAIRCHILD AF, WA 99011

FOR THE COMMANDER



CHARLES V. BAILES, Maj, USAF
Assistant Chief, Flight Safety

APPROVING OFFICIAL

DAVID CAPOTOSTI, Col, USAF
Chief of Safety

USAF AIRCRAFT ACCIDENT INVESTIGATION REPORT INDEX TAB FORM

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J TECHNICAL AND ENGINEERING EVALUATIONS OF MATERIAL (DOD)
K DD FORM 175, MILITARY FLIGHT PLAN
L DD FORM 365F, WEIGHT AND BALANCE CLEARANCE FORM F - TACTICAL
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R DIAGRAMS (FALLOUT-IMPACT AREA)
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T INDIVIDUAL FLIGHT RECORDS
V TESTIMONY AND STATEMENTS OF WITNESSES
W WEATHER OBSERVATIONS
X STATEMENTS OF INJURY OR DEATH
Y DOCUMENTS APPOINTING ACCIDENT INVESTIGATION BOARD
Z PHOTOGRAPHS NOT INCLUDED IN PART I OF SAFETY REPORT
AA SUPPORTING ADDITIONAL DATA

R

THORPE ROAD

21

19

17

15

13

11

THORPE RD

ARIZONA THORPE RD.

BARTHOLOMEW RD

5

3

1254

22

20

18

16

14

12

10

8

6

4

2

R-1

1402

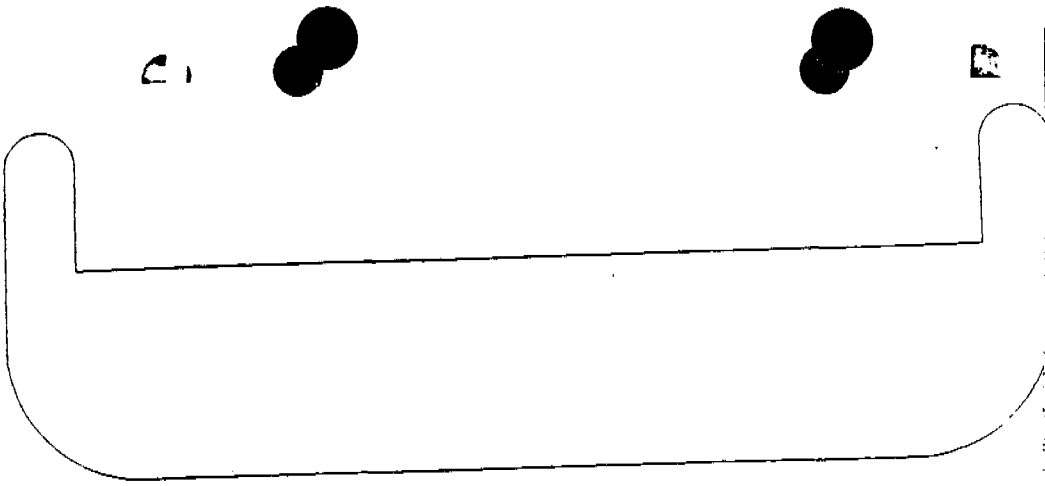
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1207

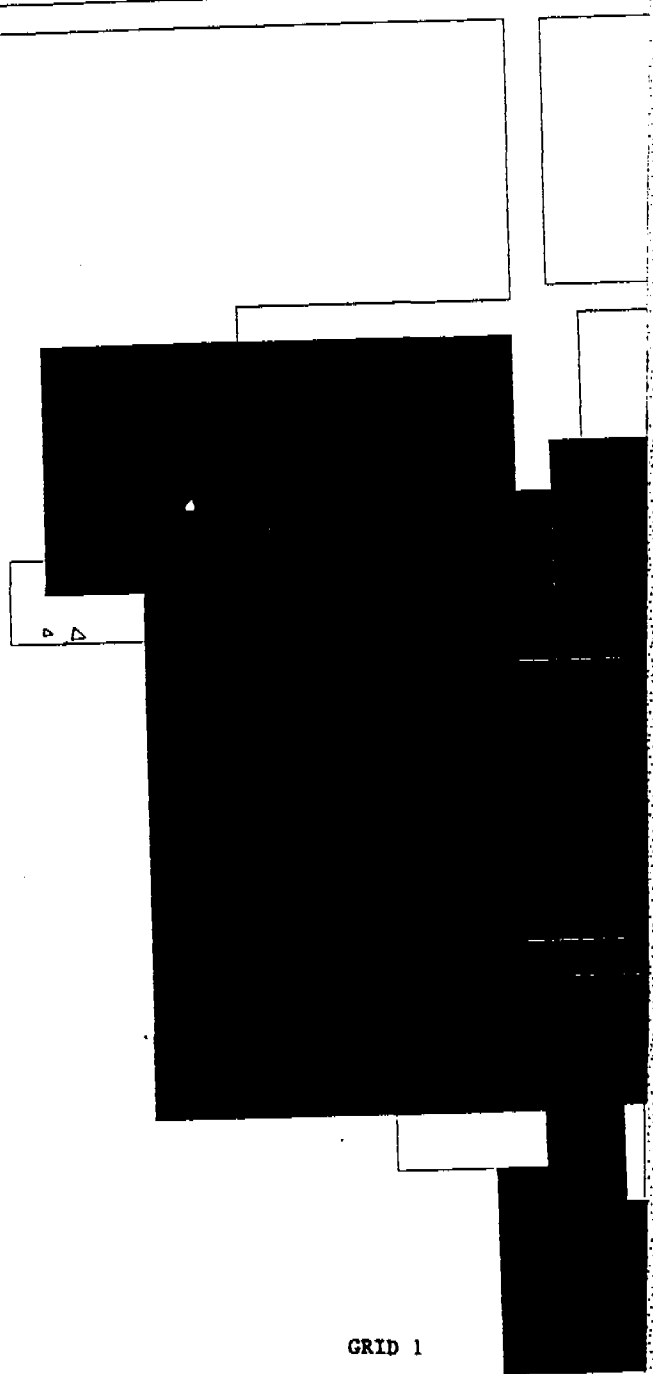
1302

1306

STREET



1254



CRIR PARACH FACI

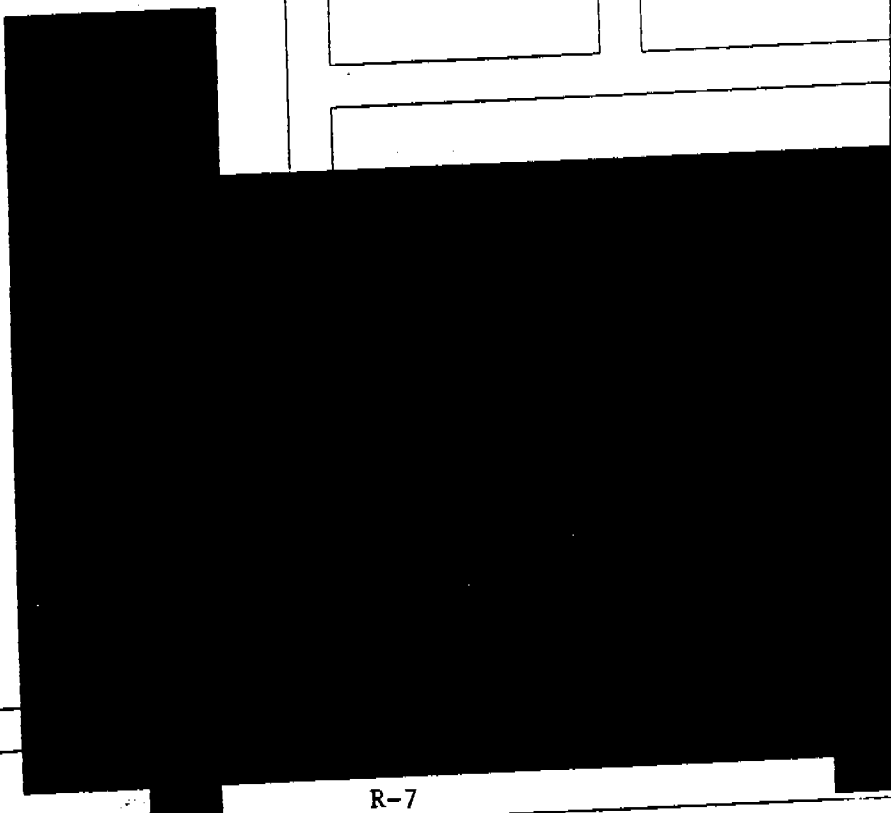
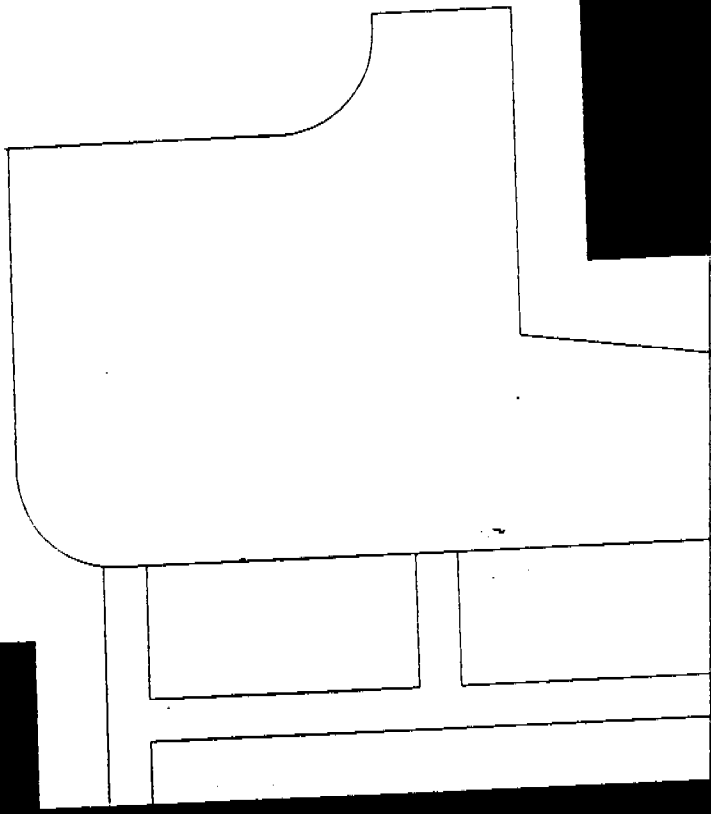
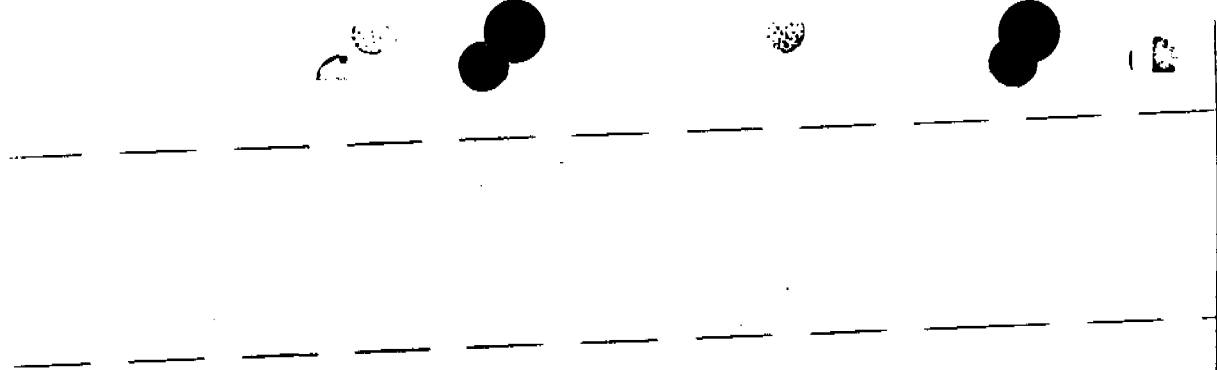
CRIR PARACH FACI

CRIR PARACH 1000

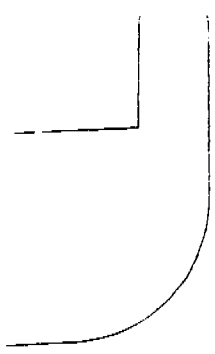
R-4

CDTH 2

BARTHOLOME



R-7

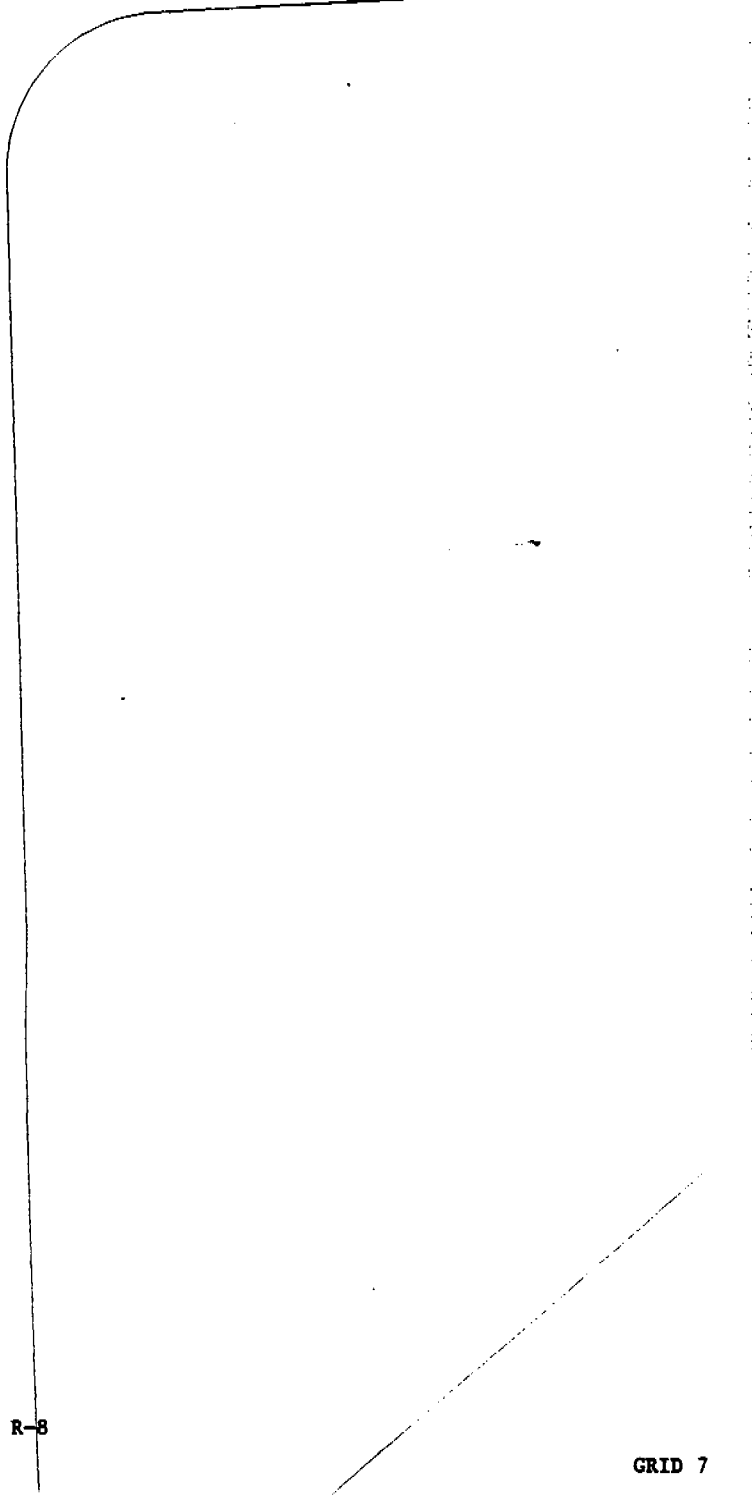


W R.D

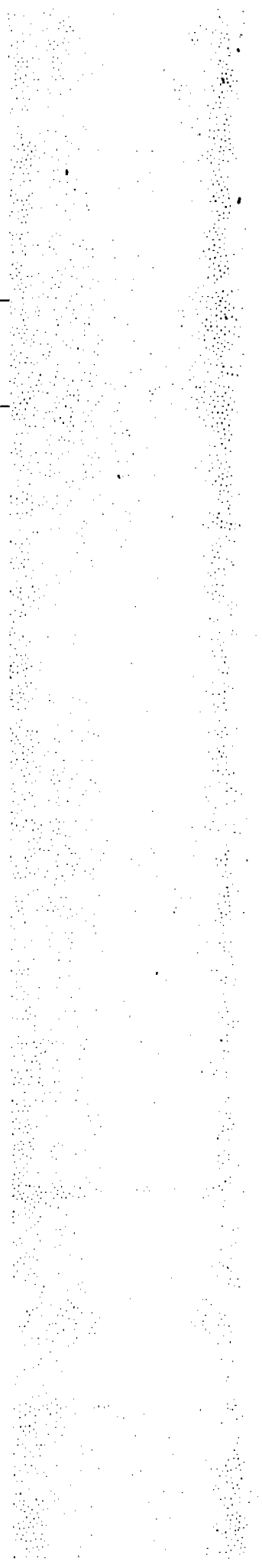


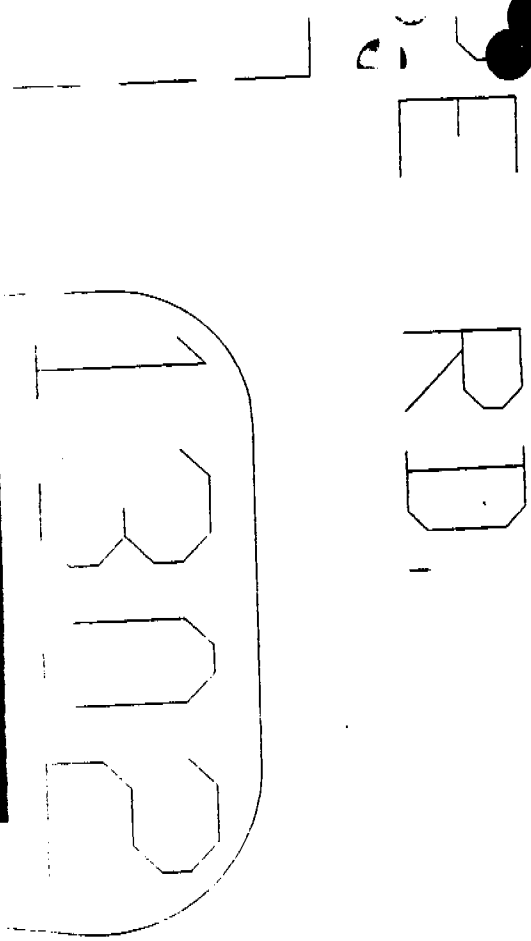
ARIZONA THOR

R-8

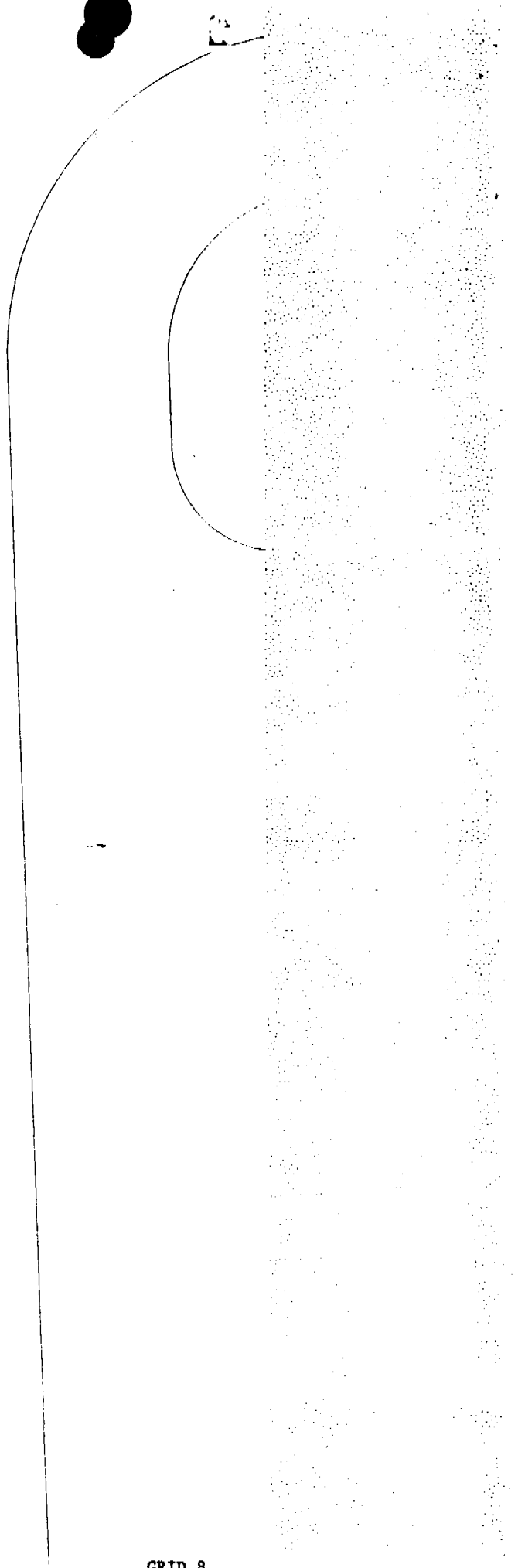


GRID 7





NEW UTILITY POLE
SET BY WWP 24 JUN 94
ELEVATION 2491.001'



THORPE

GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft



GRID NORTH

MAGNETIC

0+00 POINT OF IMPACT

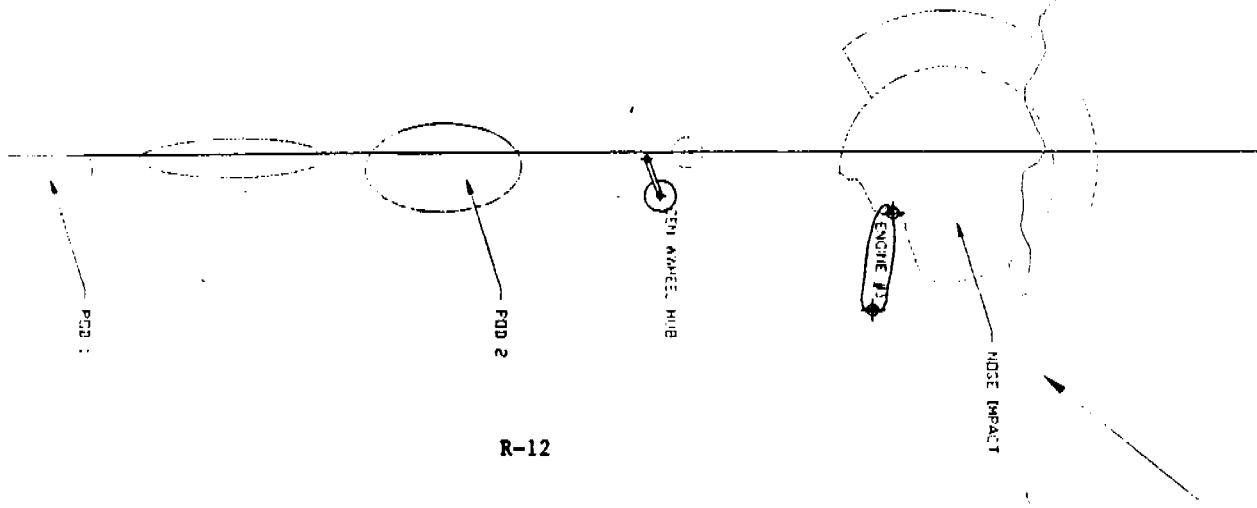
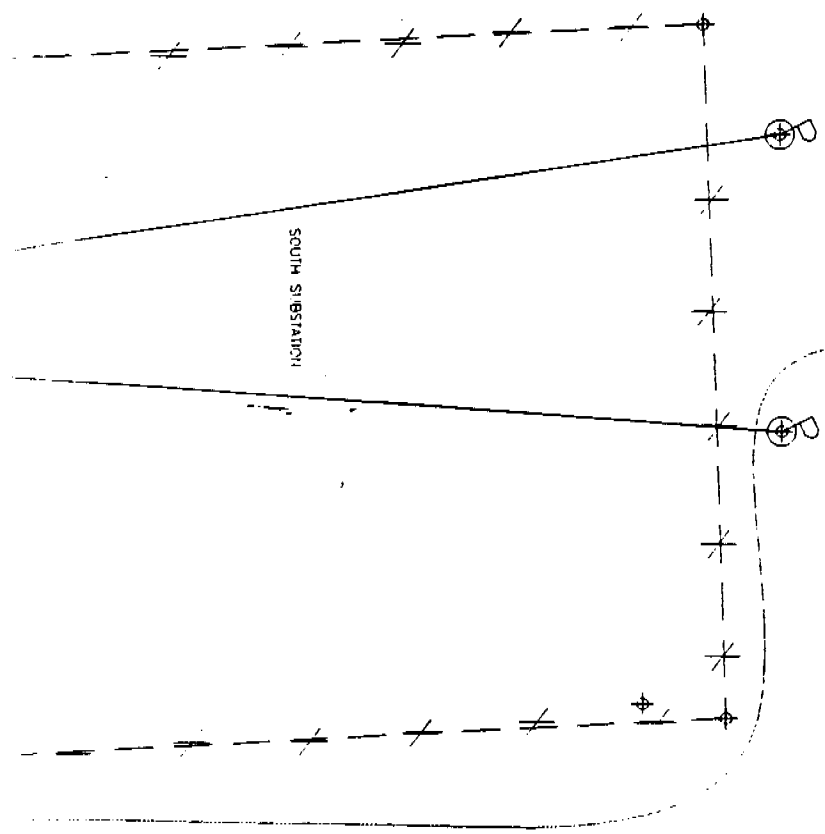
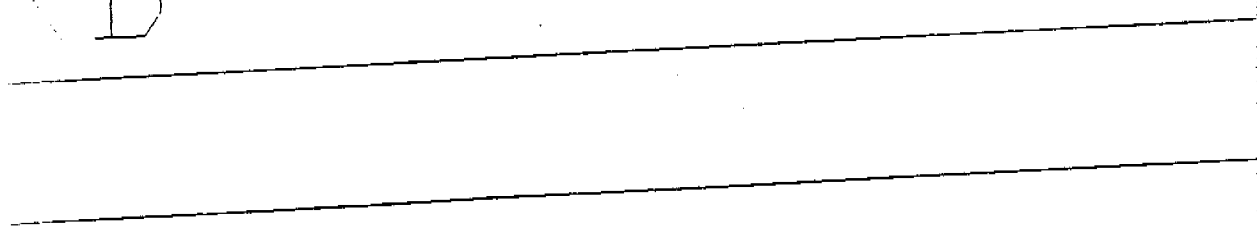
21

2



1207

RD



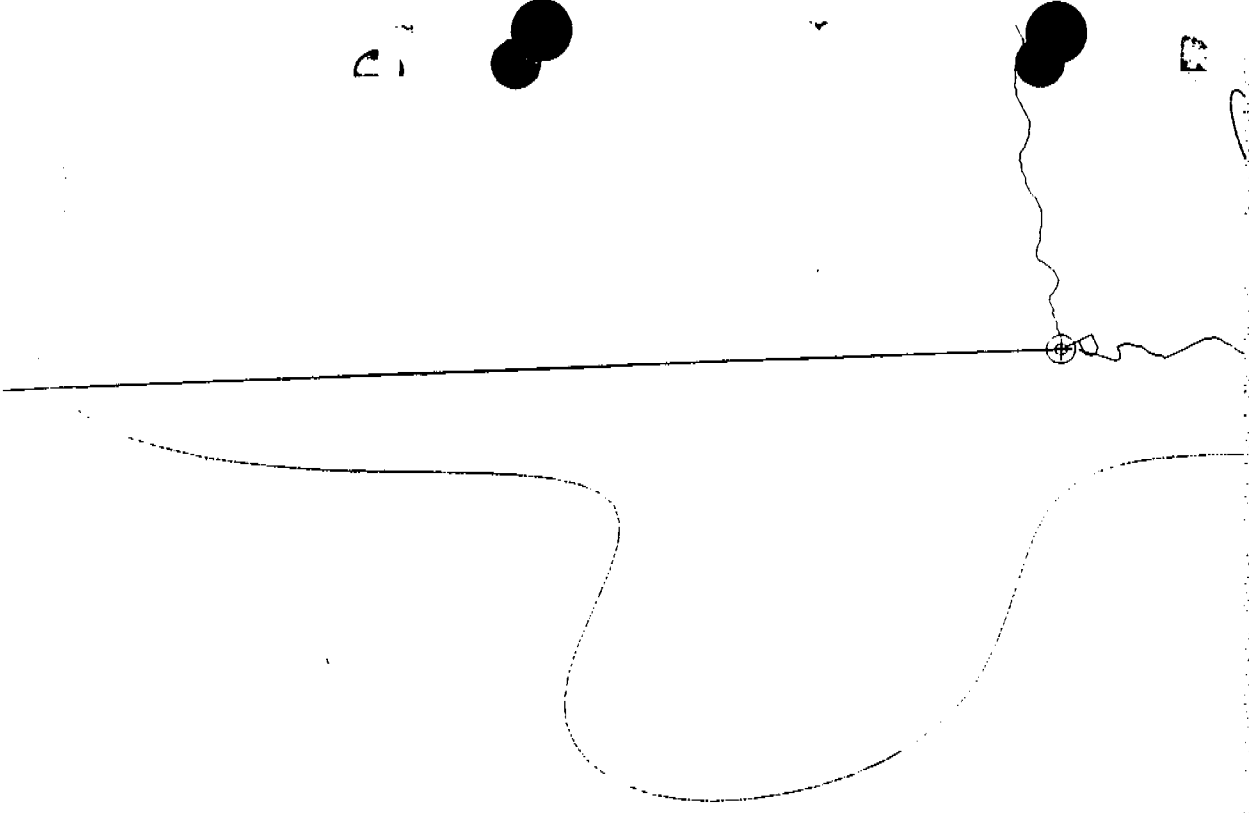
PCB :

FDD 2

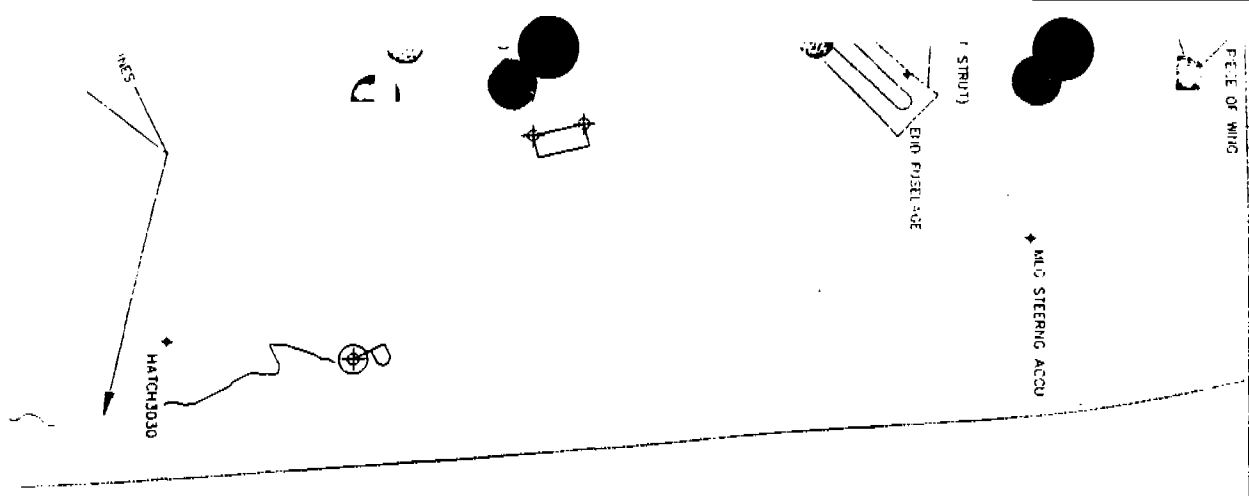
TEH AMPEL HUB

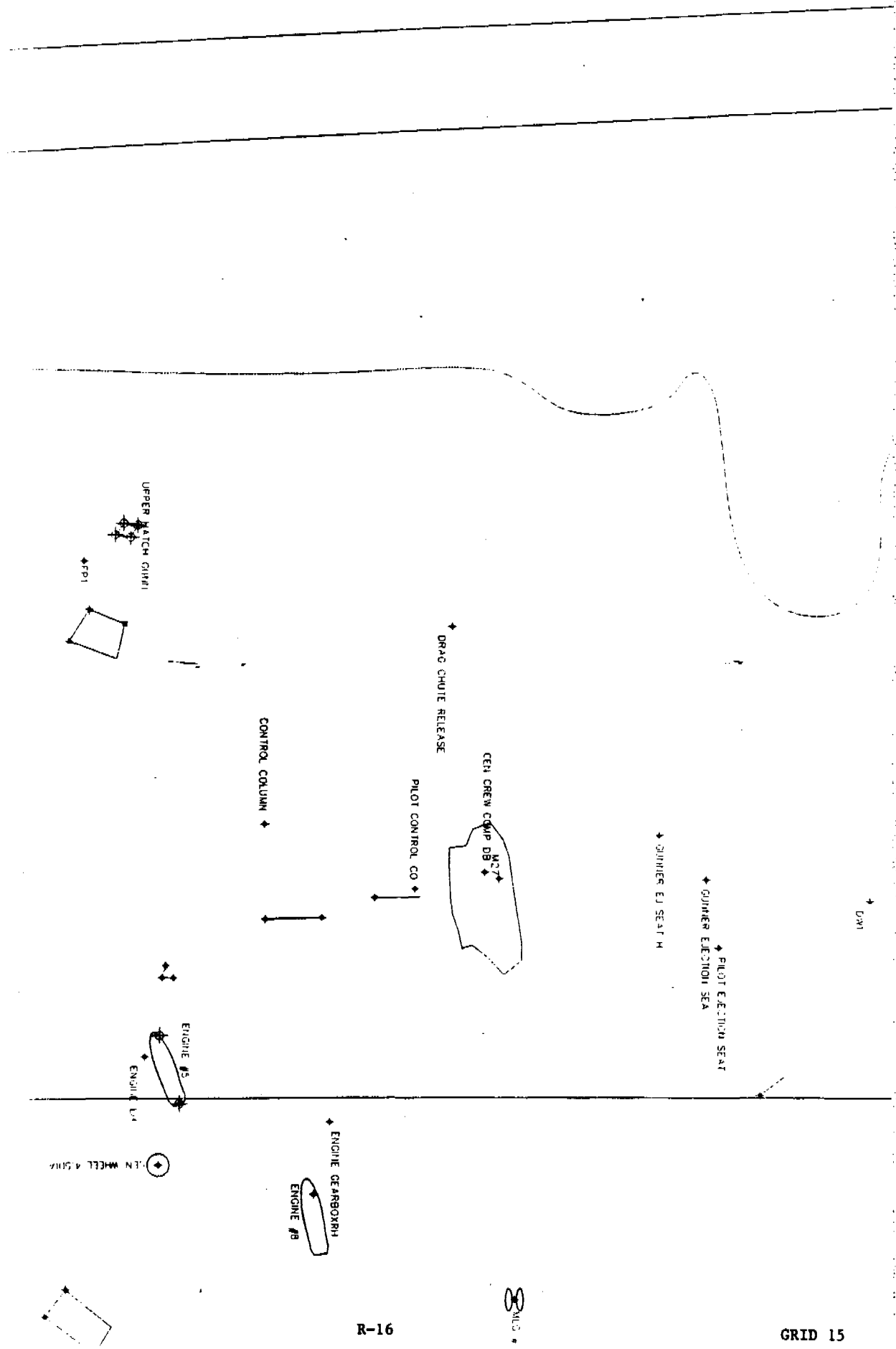
ENGINE P2

NOSE IMPACT



◆ PIM GIM FLARE





R-16

8110

GRID 15

3
EIGHT 10

ALL PM

WHEEL 4 SDA

BURN AREA

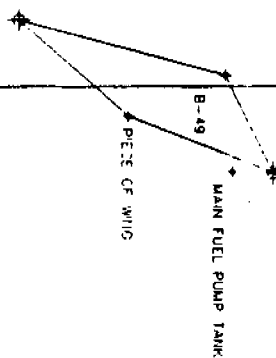
□ HATCH CREW 30X30



ACTOR BOX

ENGINE GEARBOX +

+ ENGINE DRIVEPIV



ENGINE 27

WING WHEEL

HCJ ENG BLEED VAL

DUCT ENG BLD VAL

REITER 37.00

INBOARD SAILBOAT

EXTERNAL FUEL TANK



(IN FEET)
1 inch = 20 ft.

THORPE R

ENGINE FUEL CONT

ENGINE FUEL PUMP

330 A.P. OIL COOL

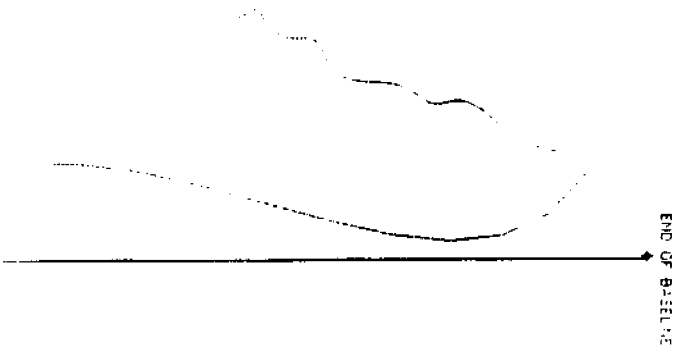
OP GEAR

⊕
WHEEL 4 SDA CEN

GRID NORTH

MAGNETIC

□AD



PATROL

THORPE ROAD

PATROL

1402

The following sheets represent
a tile arrangement of the
large scale drawings showing
all survey points with the
exception of X, P, and L
designated points.

THORPE RD

121

1207

ARIZONA THORPE RD.

PARTHOLONE RD

1302

1306

APG

A-1 47 Sec Door
A-2 Lox Converter
A-3 Bomb Door
A-4 Steering Act
A-5 Lox Converter
A-6 Bomb Door
A-7 Hyd Res
A-8 Bomb Door
A-9 Main Entry Hatch
A-9 Ext Fuel Tank
A-10 Sail Boat
A-11 INBD Eng Strut
A-11 O/B Hyd Res
A-12 Lox Converter
A-13
A-14
A-15
A-16 Nose Dome
A-17
A-18
A-19
A-20
A-21
A-22
A-23 Fwd Bomb Door Act

BOARD ITEMS

B-1 Left Exterior Tank Part
B-2 Left Exterior Tank Part
B-3 Left Exterior Tank Part
B-4 Left Exterior Tank Access Panel
B-5 Left Exterior Tank Part
B-6 Wing Fuel Access Panel
B-7 OB Lower Wing Skin
B-8 Left Exterior Fuel Tank Part
B-9 Left Tip Gear Door
B-10 Tip Gear Door Actuator
B-11 Left Wing Tip and Flux Valve
B-12 Rear Engine Mount and Beams
B-13 Left Lower Engine Cowl
B-14 Engine Fan Duct
B-15 Engine Strut Upper Spar
B-16 Left Wing Tip
B-17 Fuel Boost Pump
B-18 Upper Boom Door
B-19 Right Inboard Flap
B-20 Valve and Duct

1433-613-187D
PARKER-HANNIFIN
28V DC SERIAL #22406
LAMB #15099

B-21 Engine Bleed Valve
B-22 Fuel Press and Dump Valve
B-23 Accy Drive and Fuel Control
B-24 EPR Transducer
B-25 ATM Motor
B-26 Left Tip Gear Strut Door
B-27 Engine Fuel Control
B-28 Center Wing Tank Access Door
B-29 Forward Body Boost Pump Valve Panel
B-30 Spoiler Support
B-31 Inboard Flap Track
B-32 Inboard Flap Track
B-33 Inboard Flap Drive Screw
B-34 Spoiler #2
B-35 Outboard Flap Track
B-36 Outboard Flap Track Screw Piece
B-37 Outboard Flap Track
B-38 LH Inboard Flap
B-39 LH Spoiler
B-40 LH Outboard Flap Piece
B-41 Flap Track Screw
B-42 Flap Track Screw
B-43 Spoiler Activator
B-44 Inboard Flap Track
B-45 Inboard Flap Track
B-46 Outboard Flap Drive Screw
B-47 Wing Section
B-48 LH Inboard Flap Section
B-49 Wing Section

B-51 Out Flap Drive Screw
B-52 Metering Valve
B-53 Spoiler #12
B-54 RH Outboard Flap Section
B-55 Wing Section
B-56 Flap Track Seat
B-57 Spoiler #3
B-58 Spoiler
B-59 Flap Track
B-60 Spoiler #14
B-61 Spoiler #11
B-62 Spoiler #10
B-63 Actuator #12
B-64 Spoiler #12

BOMB NAV LIST

BN-1	Flir Scanner	
BN-2	IMU	
BN-3	IMU	
BN-4	RTM	Classified
BN-5	EVS Turret	
FCS-1	FCTS	
FCS-2	Antenna	
FCS-3	ECLP	
FCS-4	Gun and Mount	

COMM / NAV EQUIPMENT

- | | | |
|-----|-------|--------------------------------------|
| 1. | CN1 | Sat Com power supply |
| 2. | CN2 | Sat Com SV box |
| 3. | CN3 | TACAN receiver / transmitter |
| 4. | CN4 | HF RT |
| 5. | CN5 | VOR / ILS Dynamotor |
| 6. | CN6 | Radar altimeter |
| 7. | CN7 | Sat Com filter |
| 8. | CN8 | Kit - IC classified |
| 9. | CN 9 | DVS |
| 10. | CN 10 | Sat Com / LOS RT |
| 11. | CN11 | Sat Com modem - classified |
| 12. | CN 12 | APN 69 Beacon RT |
| 13. | CN 13 | Sat Com printer |
| 14. | CN 14 | UHF control box |
| 15. | CN 15 | Glidescope receiver |
| 16. | CN 16 | Part of modem (Sat Com - classified) |
| 17. | CN17 | IFF RT (front) |
| 18. | CN 18 | TACAN control box |

ECM EQUIPMENT

1.	ALT 32	Trans CSS	Conf
2.	ALT 16	Amp	Conf
3.	ALQ-155	HD	Conf
4.	ALT-32	Pwr Sup	Not Class
5.	ALQ-155	HD	Not Class
6.	ALQ-172	LRV-7	Conf
7.	ALR-46	Amps (2)	Conf
8.	Alt 16	Amp	Conf
9.	ALQ-122	Box	Conf
10.	ALQ-155	HD	Not Class
11.	ALQ-153	DDSP	Conf
12.	ALQ-153	ADSP	Conf
13.	ALT-32	Trans High	Conf
14.	ALQ-155	RT Bd11	Conf
15.	ALQ-155	RT	Conf
16.	ALQ-155	RT	Conf
17.	ALQ-155	RT	Conf
18.	ALQ-172	LRU 8	Conf
19.	ALQ-172	LRU 8	Conf
20.	ALQ-153	Control Box	Conf
21.	ALQ-155	CIP (2)	Conf
22.	ALR-20	Tuner	Conf
23.	ALR-20	Tuner	Conf
24.	ALQ-155	RT	Conf
25.	ALQ-155	Receiver	Conf
26.	ALQ-155	Receiver	Conf
27.	ALQ-155	CIP	Conf
28.	ALR-46	Processor	Conf
29.	ALR-20	Tune	Conf
30.	ALR-20	C-9449	Conf
31.	ALQ-155	CIP	Conf

AIRCRAFT GENERAL

EE-1	CSD and Gen
EE-2	CSD and Gen
EE-3	Pre-Cooler (bleed air)
EE-4	Battery Detector
EE-5	Flow Control Sensor
EE-6	Flow Control Valve
EE-7	Catalytic Filter
EE-8	Generator
EE-9	Missile Cooling Heat Exchanger
EE-10	Voltage Regulators

FUEL COMPONENTS

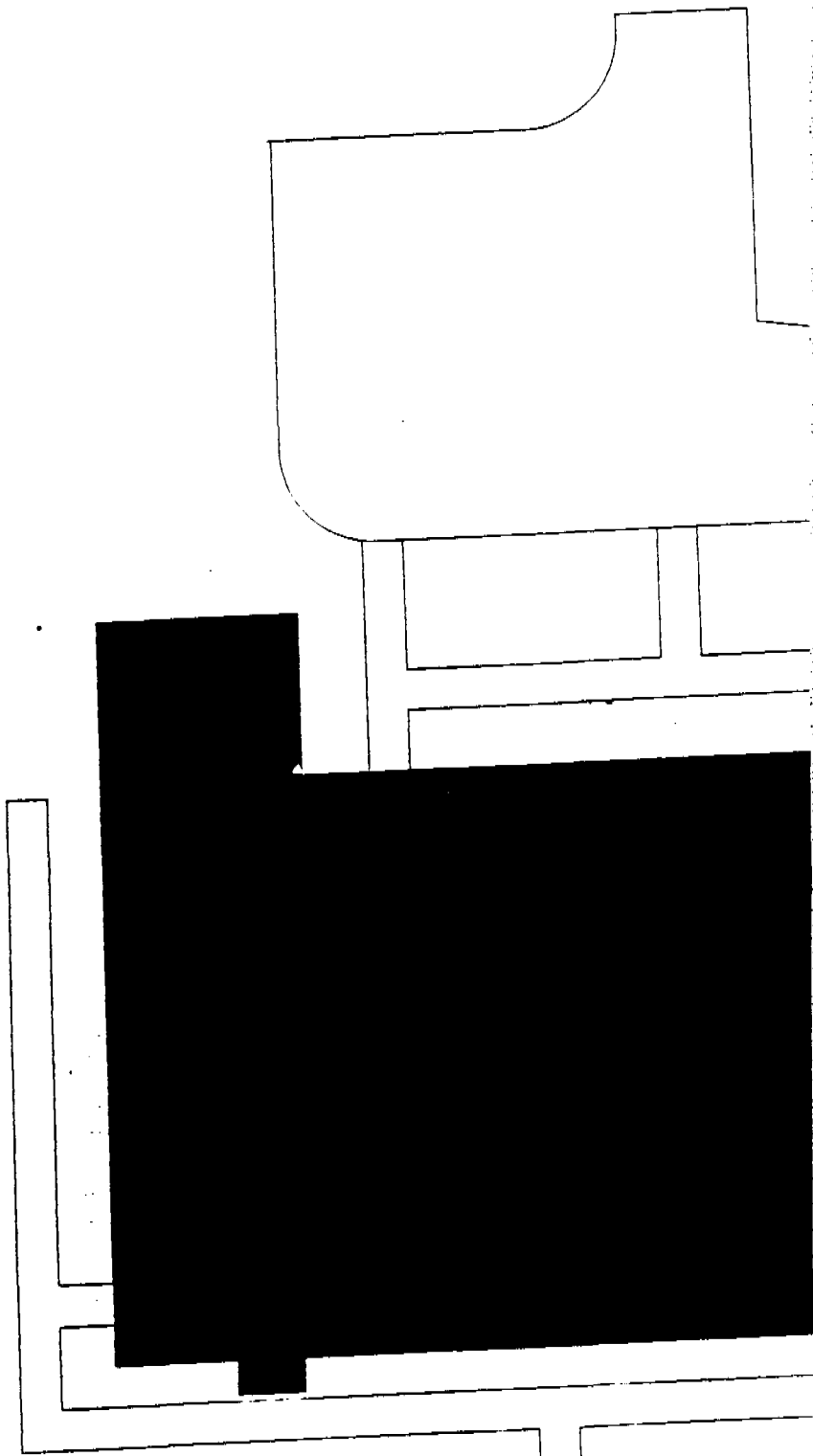
- F-1 Fuel Boost Pump Aux Tank
- F-2 Fuel Boost Pump Main Tank
- F-3 Fuel Boost Pump Main Tank
- F-4 Main Refuel Valve (Close)
- F-5 Fire Wall Shut Off Valve Open
- F-6 Fuel Boost Pump Main Tank
- F-7
- F-8 Body Tank Fuel Boost Pump
- F-9 Fuel Boost Pump Main Tank
- F-10 Fuel Boost Pump Main Tank
- F-11 Rotary Valve Crossfeed (Open)
- F-12 Rotary Valve Crossfeed Valve (Open)
- F-13 Single Point Refuel Receptacle
- F-14 Fuel Level Control Valve
- F-15 Fuel Level Control Valve
- F-16 Fuel Boost Pump Main Tank/Fuel Level Control Valve
- F-17
- F-18 Body Tank Fuel Pump
- F-19 Fuel Boost Pump Main
- F-20 Rotary Valve Crossfeed Valve #12 (Open)
- F-21 Rotary Valve Crossfeed Valve #11 (Open)
- F-22 Rotary Valve Cross feed Valve #15 (Close)
- F-23 Fuel Boost Pump Main Tank
- F-24 Fire Wall Shut Off Valve Two Each (Open)
- F-25 Rotary Valve #10 Crossfeed (Open)
- F-26
- F-27 Main Tank Fuel Boost Pump
- F-28 Main Tank Fuel Boost Pump
- F-29 Fuel Level Control Valve
- F-30 Fuel Level Control Valve
- F-31 Fire Wall Shut Off Valve (Open)
- F-32 Fire Wall Shut Off Valve (Open)
- F-33 Fuel Boost Pump Aux Tank
- F-34 Fuel Boost Pump Aux Tank

INSTRUMENTS

GCS-1	C/Pilots Air Speed 430 kts Co-Pilots Panel
GCS-2	A/P Processor
GCS-3	G-Meter
GCS-6	Eng Inst Panel
GCS-5	Altimeter AIMS
GCS-4	AIMS Computer
GCS-7	HSI
GCS-8	ADI
GCS-9	Sextant Mount
GCS-10	CG/FLAS Display Unit
GCS-11	FDC
GCS-12	YECU
GCS-13	PECU
GCS-14	A/P Servo Trim Motor

BARTHOLON

1306



R-35

GRID 2

WE

DE

BRITANNIC GROVE IN

ARIZONA

STATION

R-36



GRID 3

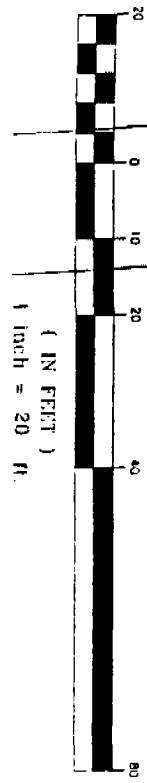
NEW UTILITY POLE
SET BY WWP 24 JUN 94
ELEVATION 2491.001'

R
D

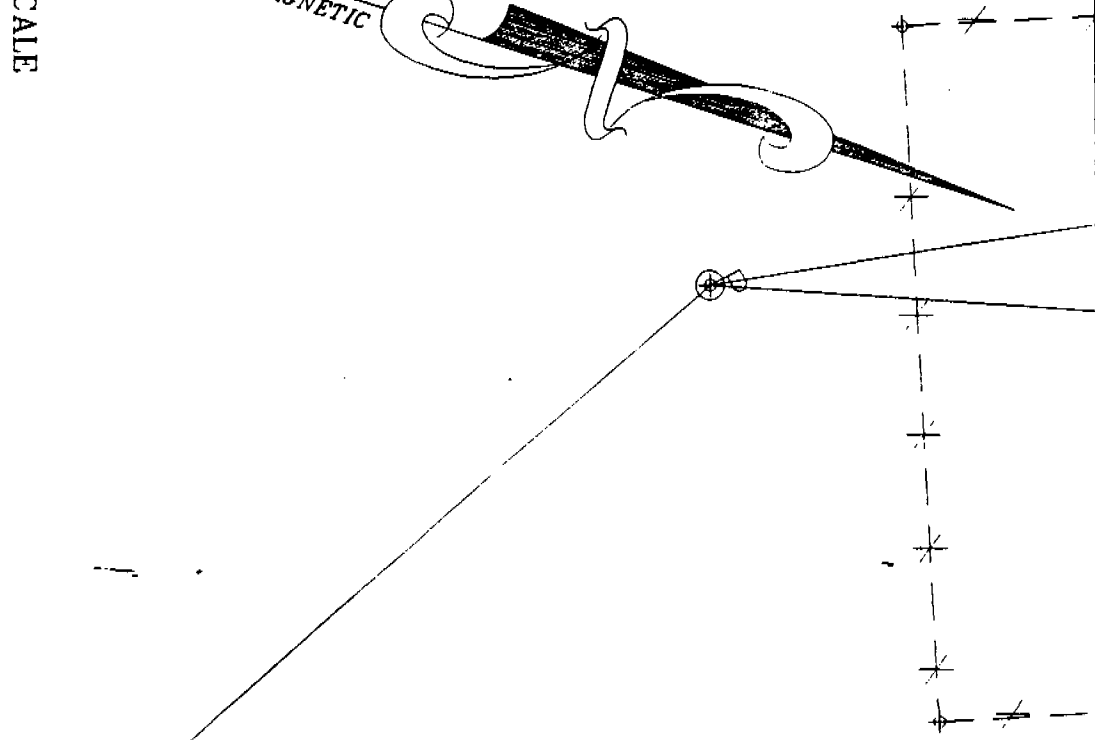
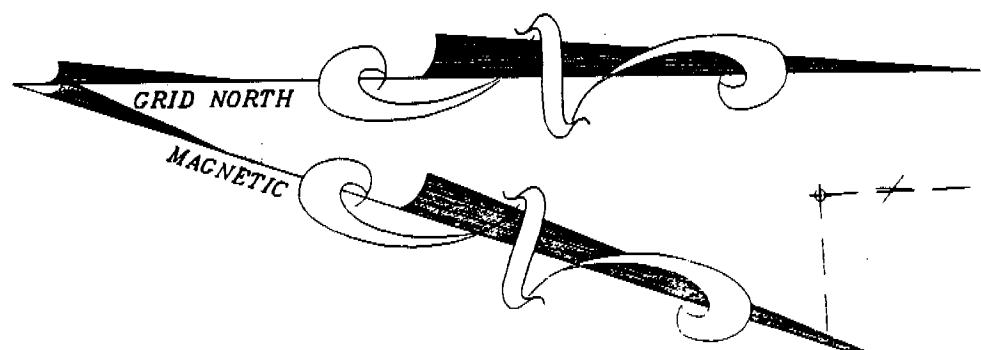
R-37

GRID 4

THURTE



GRAPHIC SCALE



0+00: POINT B FROM START OF B C TO 1020

43

42

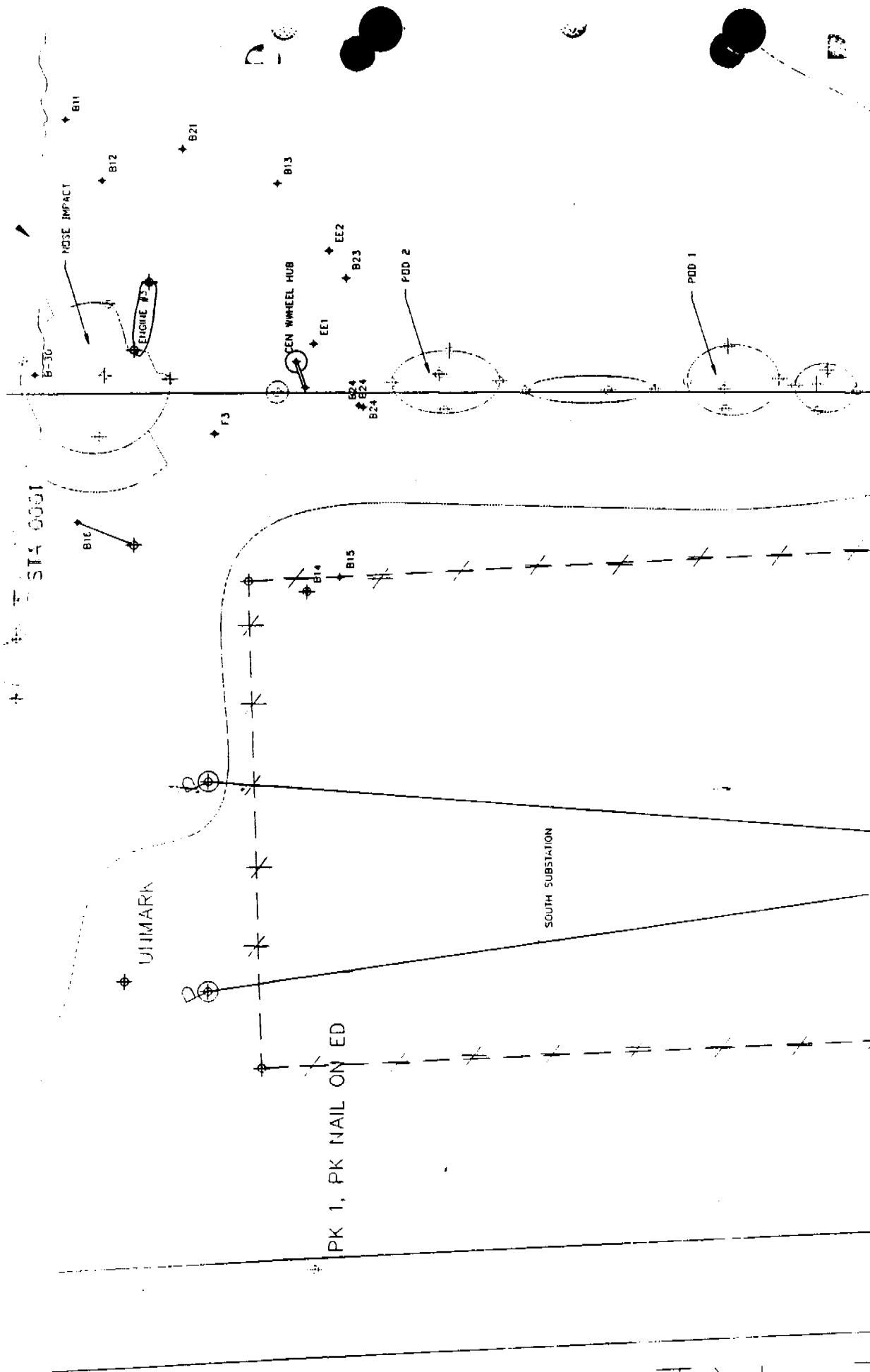
1207

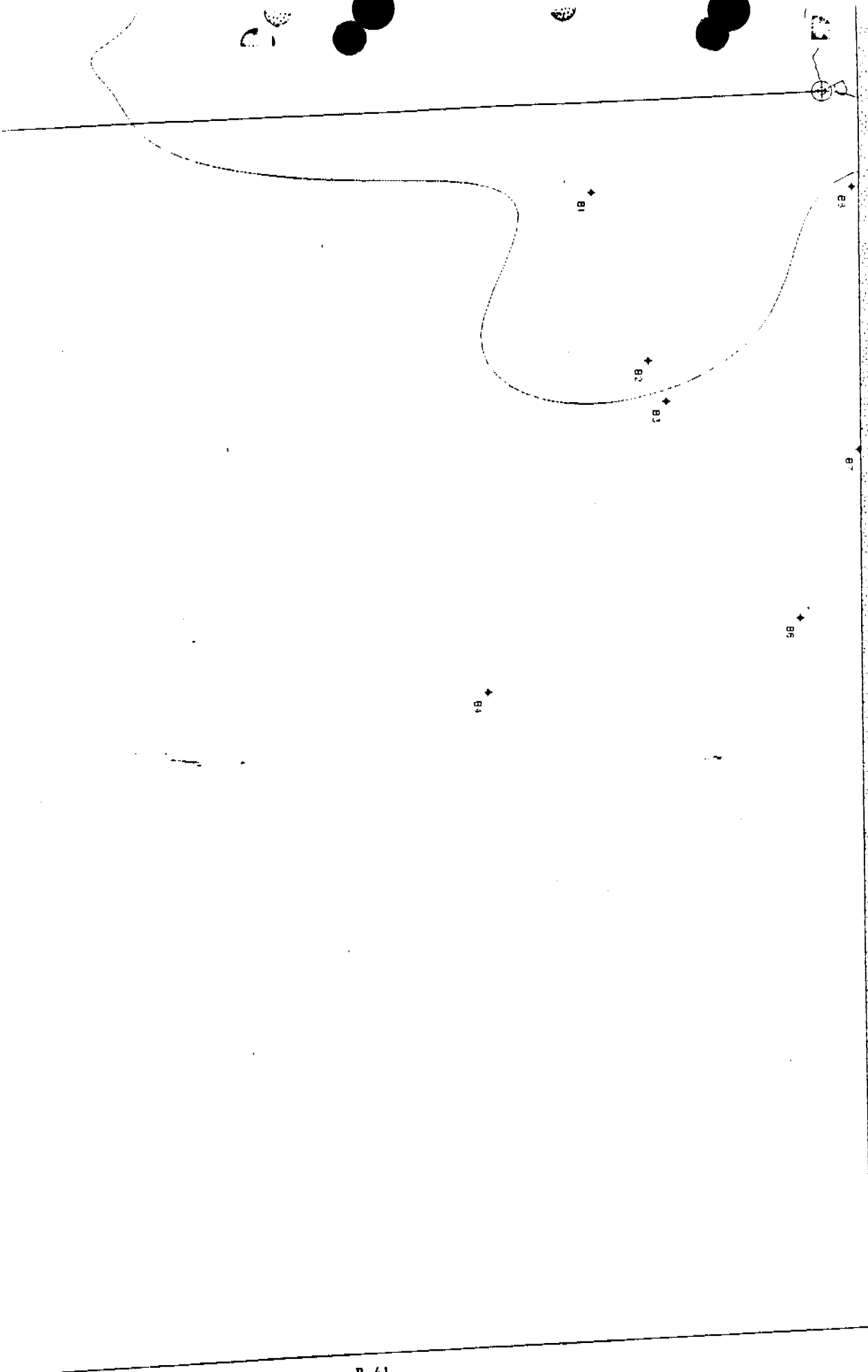
SW CORNER OF SURVIV

R-39

BU

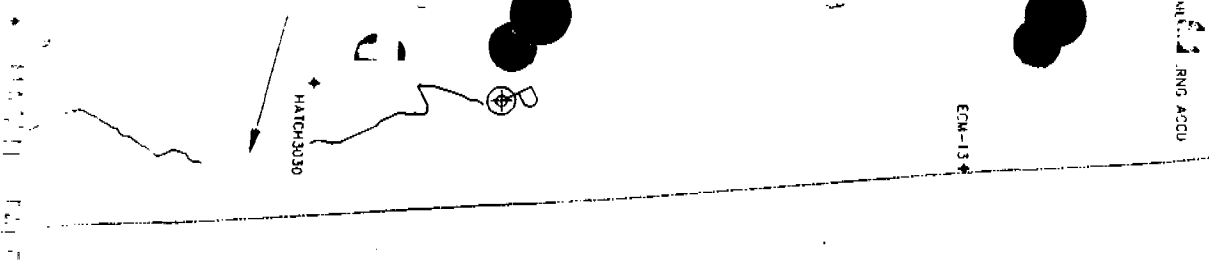
GRTD 6





R-41

GRID 8



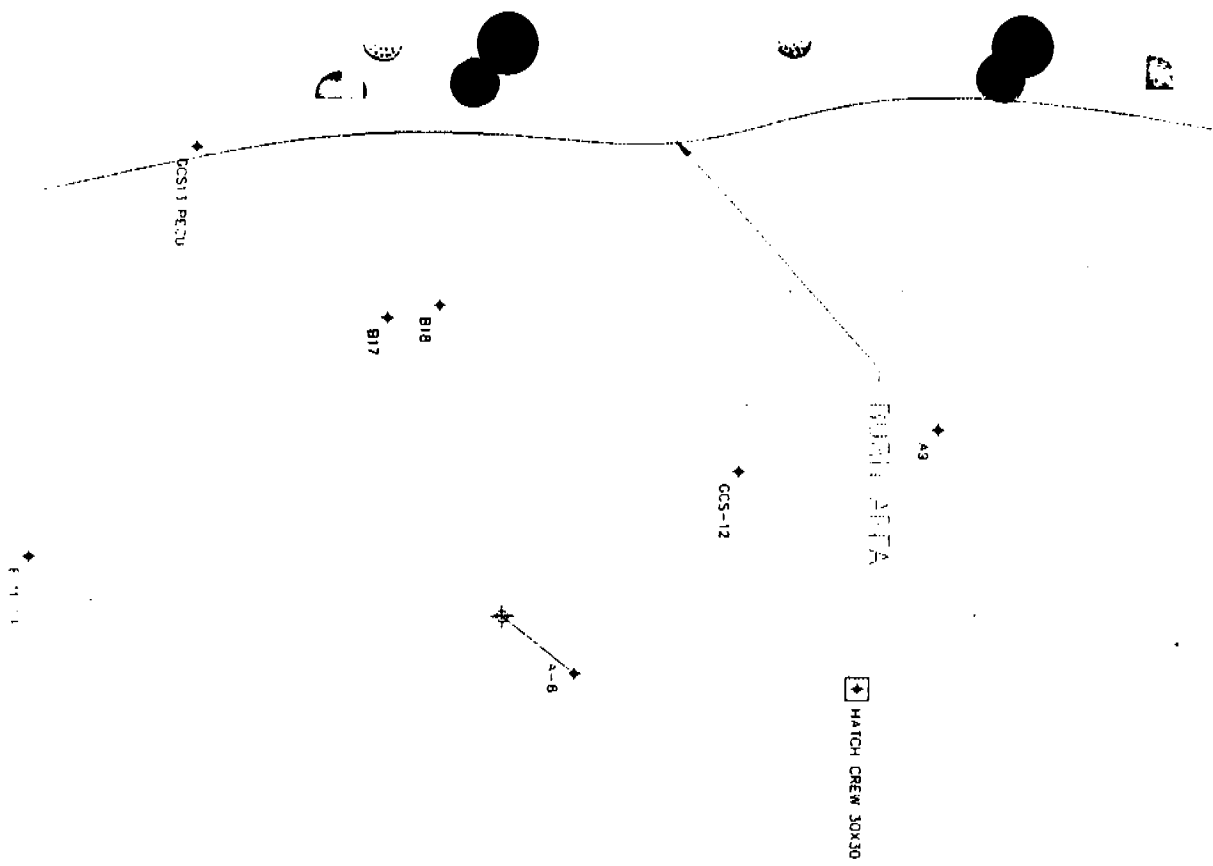
R-43

GRID 10

REFERENCE SIGN

R-44

GRID 11



ROAD PERIMETER

R-45

GRID 12

EMIGRAE

◆ PEO

✱
7
()

◆
—
—
—

♦ 312 (SPECIAL)

◆ A13 (SPOILER)

FILED OF 1913

MATH FUEL PUMP T-11P

E51

B-49

47-22
47-27

F2

F-30
A22

◆
—
—
—

415

211

◆ ENGINE DRIVEPUMP

ENGINE CLEARBOX ♦

CM13

◆ GC59

◆ SC58

CN11 +

♦ ECS7

◆
◎
◎
◎

5119

45:15 ♦

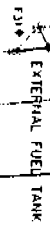
100



WHEEL



INBOARD SAILBOAT



EXTERNAL FUEL TANK

ROAD PT. OUTER

FENCE WSA CORNER, O

FENCE WSA CORNER IN

B19

ROAD CURVE CENTER

F32

BATTERY 37-107

OUT

BLD VAL

ED VA

FENCE WSA CORNER IN

FEI

R-47

GRID 14

THORPE

ENGINE FUEL CONT
ENGINE FUEL PUMP

CH14

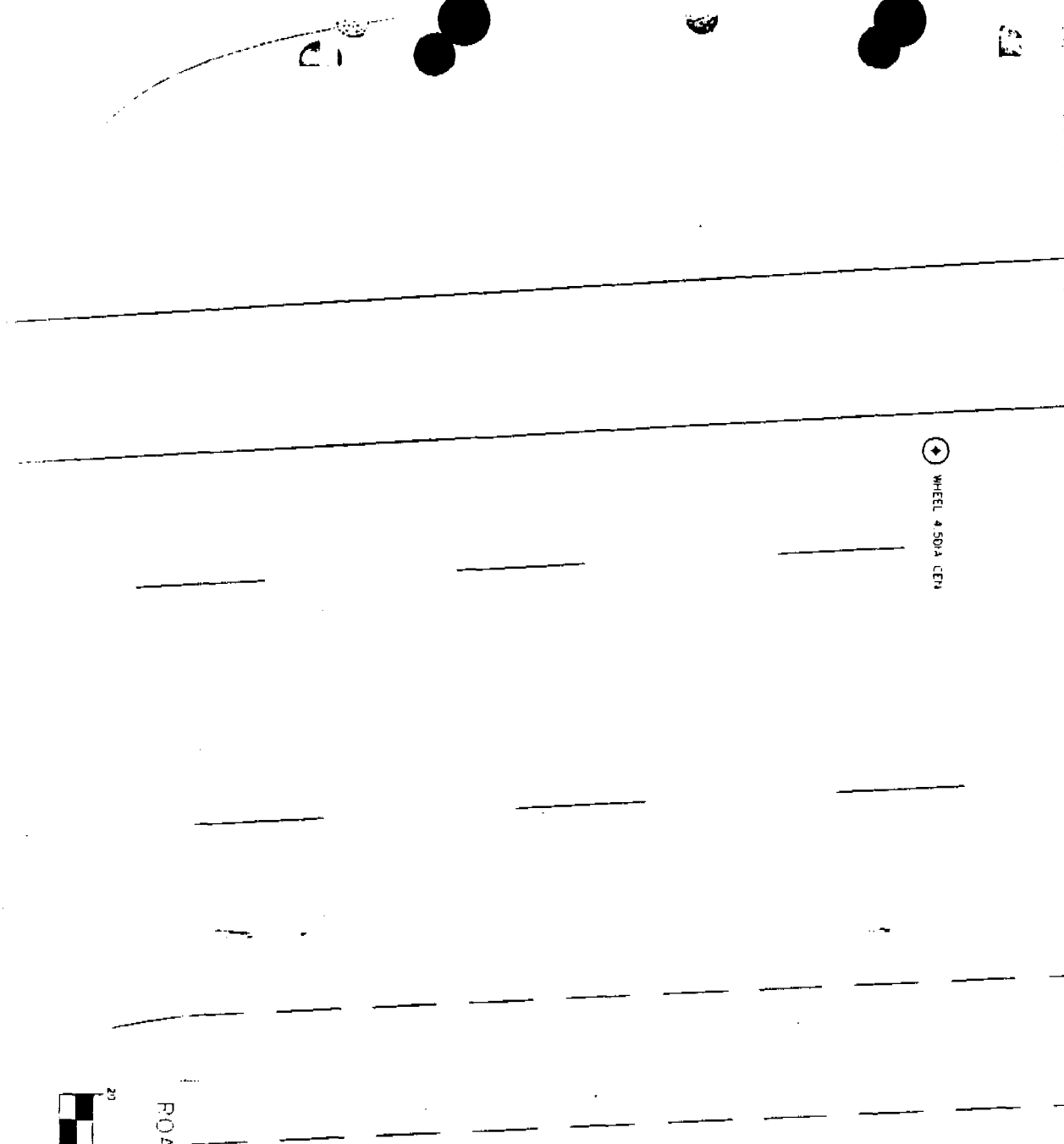
CSD AIR CIL COOL

EXTERNAL FUEL PUMP

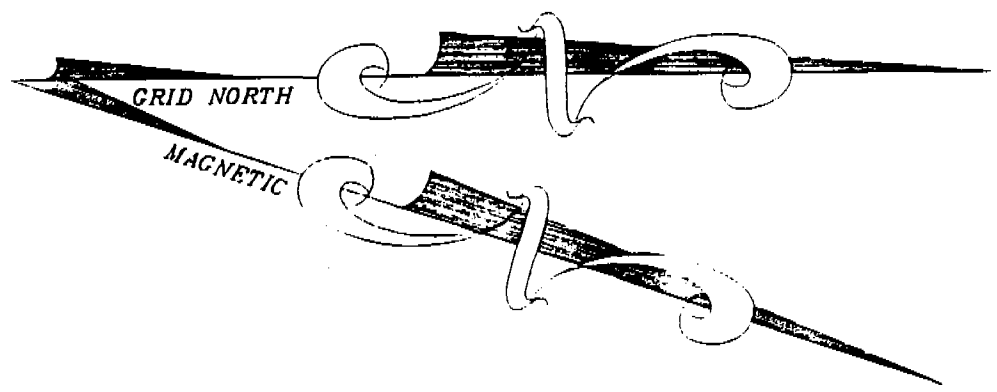
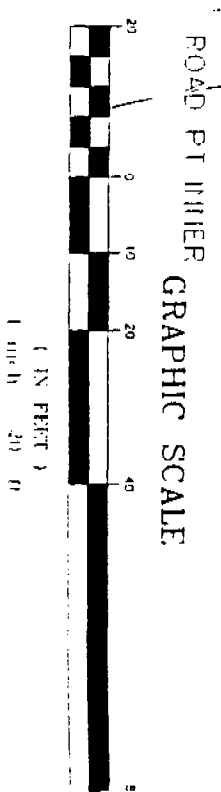
A10 (SPILLER)

R-48

GRID 15



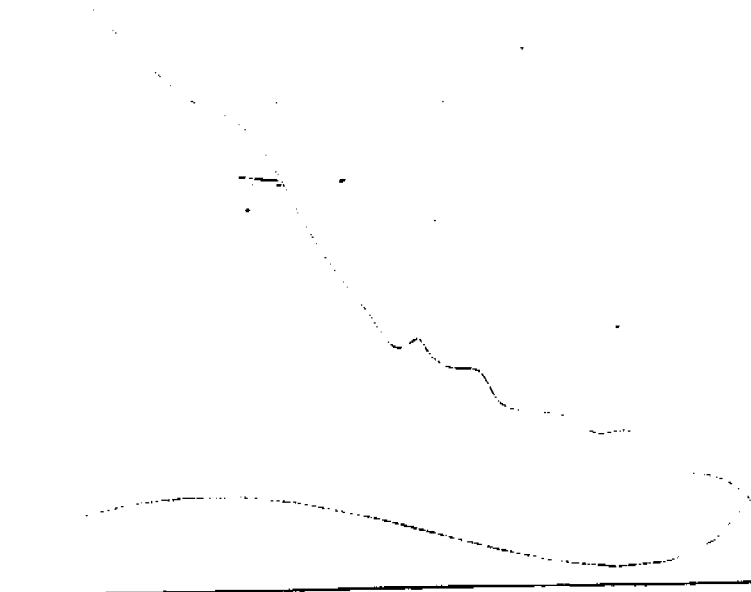
WHEEL 4 50A CFN



ROAD

CL INTERSECTIO

63



END OF BASELINE
STATION 3+00
STATION 3+00

FENCE, WSA OUTER

PATROL

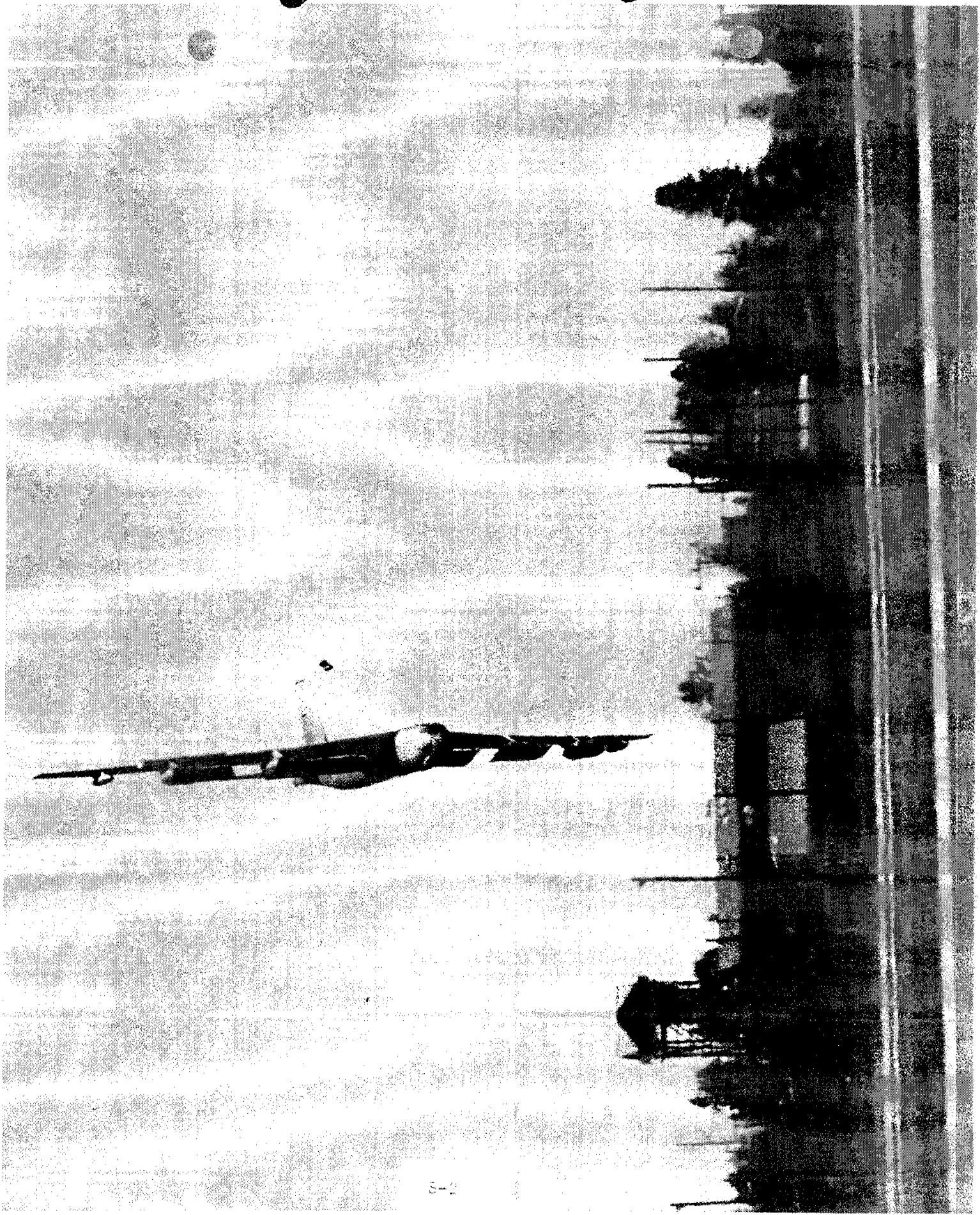
USAF AIRCRAFT ACCIDENT INVESTIGATION REPORT INDEX TAB FORM

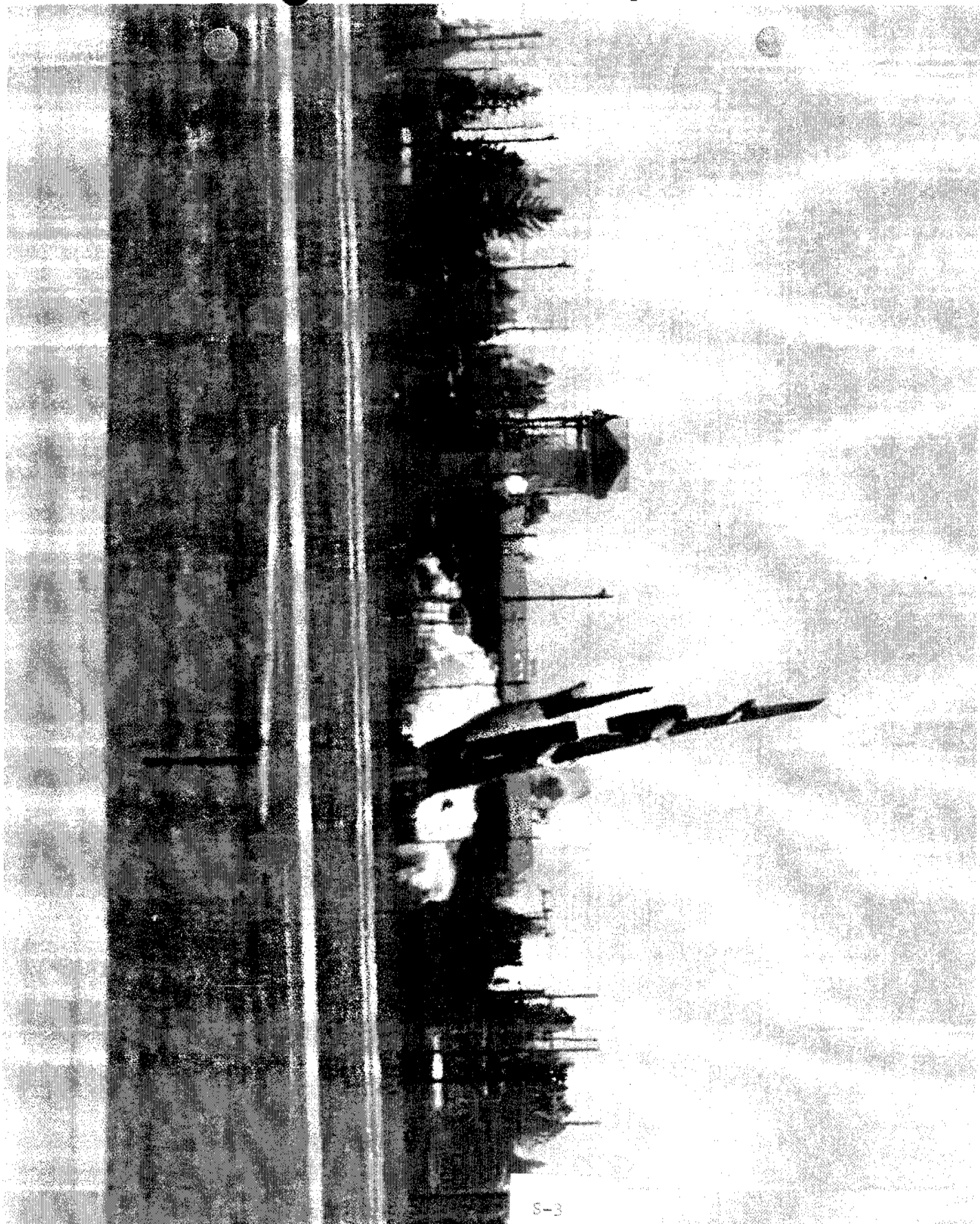
A AF FORM 711 - USAF MISHAP REPORT
C AF FORM 711b - AIRCRAFT MISHAP REPORT
D AF FORM 711c - AIRCRAFT MAINTENANCE AND MATERIAL REPORT
G FLIGHT AND PERSONNEL RECORDS
H AFTO FORMS 781
I MATERIAL DEFICIENCY REPORTS
J TECHNICAL AND ENGINEERING EVALUATIONS OF MATERIAL (DOD)
K DD FORM 175, MILITARY FLIGHT PLAN
L DD FORM 365F, WEIGHT AND BALANCE CLEARANCE FORM F - TACTICAL
M CERTIFICATE OF DAMAGE
N TRANSCRIPTS OF RECORDED COMMUNICATIONS
O ANY ADDITIONAL SUBSTANTIATING DATA REPORTS
Q ORDERS APPOINTING INVESTIGATING BOARD
R DIAGRAMS (FALLOUT-IMPACT AREA)
S PHOTOGRAPHS
T INDIVIDUAL FLIGHT RECORDS
V TESTIMONY AND STATEMENTS OF WITNESSES
W WEATHER OBSERVATIONS
X STATEMENTS OF INJURY OR DEATH
Y DOCUMENTS APPOINTING ACCIDENT INVESTIGATION BOARD
Z PHOTOGRAPHS NOT INCLUDED IN PART I OF SAFETY REPORT
AA SUPPORTING ADDITIONAL DATA

S



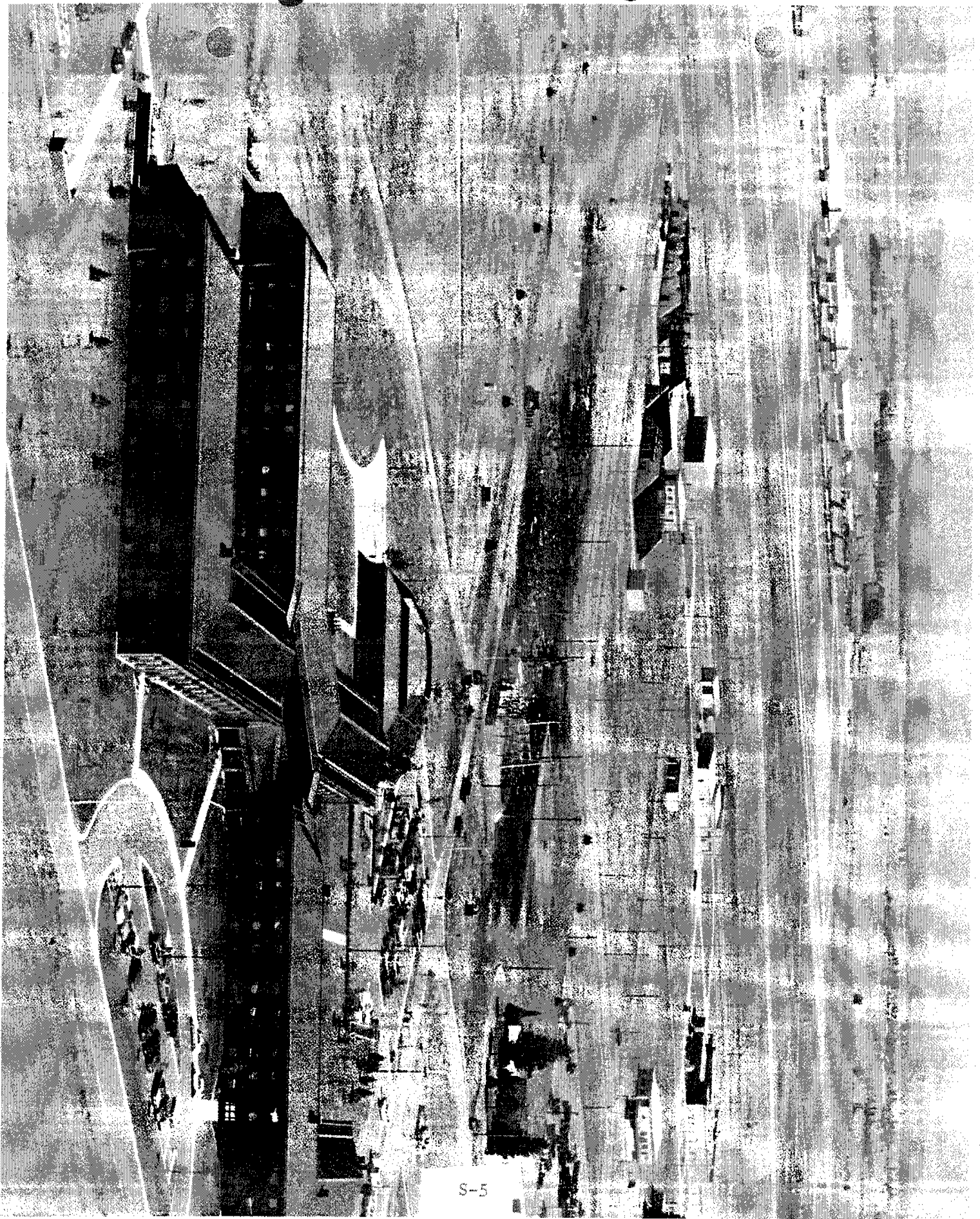
S-1







S-4



USAF AIRCRAFT ACCIDENT INVESTIGATION REPORT INDEX TAB FORM

A AF FORM 711 - USAF MISHAP REPORT
C AF FORM 711b - AIRCRAFT MISHAP REPORT
D AF FORM 711c - AIRCRAFT MAINTENANCE AND MATERIAL REPORT
G FLIGHT AND PERSONNEL RECORDS
H AFTO FORMS 781
I MATERIAL DEFICIENCY REPORTS
J TECHNICAL AND ENGINEERING EVALUATIONS OF MATERIAL (DOD)
K DD FORM 175, MILITARY FLIGHT PLAN
L DD FORM 365F, WEIGHT AND BALANCE CLEARANCE FORM F - TACTICAL
M CERTIFICATE OF DAMAGE
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O ANY ADDITIONAL SUBSTANTIATING DATA REPORTS
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S PHOTOGRAPHS
T INDIVIDUAL FLIGHT RECORDS
V TESTIMONY AND STATEMENTS OF WITNESSES
W WEATHER OBSERVATIONS
X STATEMENTS OF INJURY OR DEATH
Y DOCUMENTS APPOINTING ACCIDENT INVESTIGATION BOARD
Z PHOTOGRAPHS NOT INCLUDED IN PART I OF SAFETY REPORT
AA SUPPORTING ADDITIONAL DATA

T

**USAF AIRCRAFT ACCIDENT
INVESTIGATION REPORT
INDEX TAB FORM**

COLONEL ROBERT E. WOLFF'S FLIGHT RECORDS
LIEUTENANT COLONEL ARTHUR A. HOLLAND'S FLIGHT RECORDS
LIEUTENANT COLONEL MARK C. MCGEEHAN'S FLIGHT RECORDS
LIEUTENANT COLONEL KENNETH S. HUSTON'S FLIGHT RECORDS

T-1
T-2
T-3
T-4

RECORD OF EVALUATION

NAME, LAST-FIRST-MIDDLE INITIAL

WOLFF, ROBERT E

TYPE AIR-RAFT	TYPE OF CHECK	DATE COMPLETED	QUALIFICATION LEVEL (COMMAND)	TYPE AIR-CRAFT	TYPE OF CHECK	DATE COMPLETED	QUALIFICATION LEVEL (COMMAND)
41C	Academic Instrument	20 MAY 77	(ATC)				
41C	Initial NAV	27 May 77	(ATC)				
41C	Initial qual	2 Jun 77	(ATC)				
41C	MM contact Neither zone	16 Sep 77	(ATC)				
41C	ANNUAL QUALIFICATION	16 DEC 77	(ATC)				
41C	MISSION QUAL	14 JUN 78	(ATC)				
41C	ACADEMIC INSTRUMENT	29 AUG 78	(ATC)				
41C	Annual Qual	15 Nov 78	(ATC)				
Reassigned to SAC							
B52H	Requal CPT	27 Nov 79	Q (SAC)				
B52H	Requal FP Instrument	11 Dec 79	Q (SAC)				
B52H	Contingency No Notice FP	11 Jul 80	Q (SAC)				
B52H	Initial Instructor CPT	19 Aug 80	Q (SAC)				
B52H	ICEVG Conting No Notice FP	9 Dec 80	Q (SAC)				
B52H	Initial Instructor	16 Dec 80	Q (SAC)				
B52H	P/IP CPT	26 Aug 81	Q (SAC)				
B52H	Qual/Inst	FP/IP 8 Dec 81	Q (SAC)				
B-52G	Requal/ Instrument	9 Jun 87	Q (SAC)				
B-52G	Instructor Requal	17 Jun 87	Q (SAC)				
----	Assigned to	42 BMW	-----				
B-52G	CONVENTIONAL Qual/Instrument	5 Nov 88	Q (SAC)				
----	Assigned	92 BW, Fairchild	AFB WA-----				
B52H	Basic Qual	18 Nov 93	1 (ACC)				

CERTIFICATE OF CREW QUALIFICATION

18 Nov 93

I. EXAMINEE IDENTIFICATION		
NAME (Last, First, Middle Initial) Wolff, Robert E.		GRADE Col
ORGANIZATION AND LOCATION 325 BS, Fairchild AFB WA		SSAN [REDACTED]
		ACFT/CREW POSITION B-52H/P
		ELIGIBILITY PERIOD N/A

II. QUALIFICATION				
GROUND PHASE			FLIGHT PHASE	
EXAMINATION/CHECK	DATE	GRADE	MISSION/CHECK	DATE
Closed Book	16 Nov 93	100(S)	BASIC QUAL/INSTMT	18 Nov 93
Open Book	16 Nov 93	100		
INSTMT	15 Nov 93	100		
QUALIFICATION LEVEL		RESTRICTION (Explain in Comments) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	ADDITIONAL TRAINING	
QUALIFIED	UNQUALIFIED		DUE DATES N/A	
1			DATE ADDITIONAL TRAINING COMPLETED	
EXPIRATION DATE OF QUALIFICATION 30 April 1995				

COMMENTS (If more space is needed, continue on reverse)

III. CERTIFICATION						
TYPED NAME AND GRADE	ORGANIZATION	CHECK			SIGNATURE	DATE
		CONCUR	DO NOT CONCUR	REMARKS		
1 FLIGHT EXAMINER Arthur A. Holland, Lt Col	92 OG			X	<i>Arthur A. Holland</i>	19 Nov 93
2 REVIEWING OFFICER Jay P. Slaughenhaupt, Maj	92 OG	X			<i>Jay P. Slaughenhaupt</i>	22 Nov 93
3 FINAL APPROVING OFFICER William E. Pellerin, Col	92 OG	X			<i>William E. Pellerin</i>	24 Nov 93

I CERTIFY that I have been briefed and understand the action being taken this date.

DATE 6 DEC 1993	TYPED NAME AND GRADE OF EXAMINEE Robert E. Wolff, Col	SIGNATURE <i>Robert E. Wolff</i>
---------------------------	---	-------------------------------------

V. Examiner's Remarks:

A. Mission Description: Col Wolff's basic qualification/instrument evaluation was scheduled on a pilot proficiency sortie within the local area at Fairchild. All required traffic pattern activity was skillfully accomplished.

B. Discrepancies: None

RECEIVED

AERONAUTICAL ORDER (PA)
AVIATION SERVICE

CHANGE AVIATION SERVICE CODE FROM 3A

ENTITLEMENT: CONTINUOUS ACIP
TERMINATED. CONDITIONAL ACIP
AUTHORIZED.

NAME: WOLFF ROBERT E

GRADE: COL

SSAN: [REDACTED]

CREW POSITION: PILOT

WING: 0092 BW

ORGANIZATION: 0325 BS

OFFICE SYMBOL: CV

LOCATION: FAIRCHILD AFB

REQUIRED TO PERFORM FREQUENT AND REGULAR FLIGHTS: YES

REQUIRED TO PERFORM PARACHUTE DUTIES : NO

ASC: 7A FAC: 3 TSC: E ASD: 11 SEP 69 OSD: 31 MAY 69 OFDA:140

REMARKS: ASC CHANGE DUE TO MEMBER PASSING 25 YEARS OF OFFICER SERVICE. MEMBER
IS ENTITLED TO CONDITIONAL ACIP, AND MUST FLY 4 HOURS A MONTH TO
QUALIFY FOR PAY. CIRCUMSTANCES PREVENTED WRITTEN ORDERS IN ADVANCE.

EFFECTIVE DATE: 31 MAY 94


TERMINATION DATE: 30 SEP 99

AUTHORITY: AFR 60-1 PARAGRAPH 2-3

REQUEST DATE: 01 JUN 94

SIGNATURE ELEMENT OF ORDERS AUTHENTICATING OFFICIAL:
FOR THE COMMANDER

DEPARTMENT OF THE AIR FORCE
HQ 92D BOMB WING(ACC)
FAIRCHILD AFB WA 99011-5000


JOHNNY BUTLER, JR., SMSGT, USAF
NCOIC, FLIGHT RECORDS

DISTRIBUTION: C

AERONAUTICAL ORDER NUMBER: 0217

INDIVIDUAL PHYSIOLOGICAL TRAINING RECORD

(For officers this record will be kept as a permanent part of AF Form 846, "Aircrew Standardization/Evaluation Records." For airmen this record will be kept as a permanent part of the Field Medical Record.)

LAST NAME-FIRST NAME-MIDDLE INITIAL Wolff, Robert			GRADE 2d Lt	SSAN [REDACTED]
TYPE OF TRAINING	PERCENT GRADE	AIR FORCE BASE	DATE	SIGNATURE OF PHYSIOLOGICAL TRAINING OFFICER
ORIGINAL PHASE	94	Williams, Az.	20 Oct 69	ROBERT E. SHERMAN, CAPT, USAF, BSC
PASSENGER PHASE				
REFRESHER PHASE	SATIS	CARSWELL AFB, TX	6 Mar 73	JAMES A. KEY, CAPT, USAF, BSC
REFRESHER	94.7	PETERSON AFB, CO	13 Apr 77	ROBERT L. MCMASTER, CAPT USAF
REFRESHER	COMP	ELLSWORTH AFB	2 APR 80	PETER J. SEBERGER, MAJ, USAF
REFRESHER TTB	SATIS	ANDREWS AFB, MD	18 FEB 87	SEAN P. SCULLY, CAPT, USAF, BSC
REF/TTB		FAIRCHILD AFB, WA	30 SEP 93	DAVID B. BROWN, CAPT USAF, BSC
RAPID DECOMPRESSION		Williams, Az.	10 Oct 69	ROBERT E. SHERMAN, CAPT, USAF, BSC
EJECTION SEAT TRAINER		Williams, Az.	16 Oct 69	ROBERT E. SHERMAN, CAPT, USAF, BSC
PRESSURE SUIT TYPE		6		
PRESSURE SUIT REFRESHER				
PARA.SAIL		Williams, Az.	5 Nov 69	ROBERT E. SHERMAN, CAPT, USAF, BSC
NIGHT VISION		Williams, Az.	13 Oct 69	ROBERT E. SHERMAN, CAPT, USAF, BSC

REMARKS

Completion of T-37 Ejection Seat Training for Jet Aircrews and Passengers in accordance with ATCR 50-24 on 10 Oct 69.

Robert E. Sherman
Physiological Training Officer

Completion of T-38 Ejection Seat Training for Jet Aircrews and Passengers in accordance with ATCR 50-24 on MAR 18 1970.

Robert E. Sherman
Physiological Training Officer

MEDICAL RECOMMENDATION FOR FLYING OR SPECIAL OPERATIONAL DUTY

This Form is Subject to the Privacy Act of 1974 - Use Blanket PAS DO Form 2005)

TO: (HOSM/Unit Scheduling Officer) or (Commander/Duty Section)

FROM:

PHYSICAL EXAMS & STANDARDS
92D STRATEGIC HOSPITAL/SGPS
FAIRCHILD AFB WA 99011-5300

DATE

DOTF

6 Jun 94

NAME (Last, First, Middle Initial)

Wolf Robert E

GRADE

Col

SSN

RATING/FLYING OR SPECIAL OPERATIONAL DUTY

ASC

ACTIVE FLYING

ORGANIZATION

MAJCOM

CMO Pilot

3A

☒ YES

☐ NO

QGBW

ACC

THE ABOVE INDIVIDUAL HAS BEEN FOUND (Check appropriate boxes):

MEDICALLY RESTRICTED FROM FLYING OR SPECIAL OPERATIONAL DUTY (DNIF)

MEDICALLY CLEARED FOR FLYING OR SPECIAL OPERATIONAL DUTY FOLLOWING AN ILLNESS OR INJURY

☒

MEDICALLY CLEARED FOR FLYING DUTY FOLLOWING:

INITIAL MEDICAL
EXAMINATION

☒

PERIODIC MEDICAL
EXAMINATION

INITIAL CLEARANCE
(This Base)

AIRCRAFT MISHAP

REQUIRED TO WEAR VISION CORRECTION DEVICES WHILE PERFORMING FLYING OR SPECIAL OPERATIONAL DUTY.

RATED OFFICER: ILLNESS OR INJURY WILL NOT BE RESOLVED WITHIN 180 DAYS.

NONRATED OFFICER OR ENLISTED PERSONNEL: ILLNESS OR INJURY WILL NOT BE RESOLVED WITHIN 90 DAYS.

ACTUAL DATE FOUND DNIF

ESTIMATED DURATION OF DNIF

ACTUAL DATE FOUND MEDICALLY CLEARED

TOTAL DAYS DNIF THIS ILLNESS/INJURY

REMARKS

*PE Due by Jun 95
AF/L*

DATE MEDICAL CLEARANCE EXPIRES

30 Jun 95

MEDICAL EXAMINATION MAY BE ACCOMPLISHED IN
THE MONTH AND YEAR INDICATED:

TYPED OR PRINTED NAME AND GRADE OF FLIGHT SURGEON

Doyle ISAAC LTC, USAF MC, CCS

SIGNATURE

Doyle Isaac

DATE

6 Jun 94

I CERTIFY that I have been notified and understand the above actions and recommendations.

☐ DO

☒ DO NOT

wear contact lenses while performing flying or special operational duty.

SIGNATURE OF FLYER OR INDIVIDUAL

Robert E. Wolf

DATE

6 Jun 94

PREPARED 94 AUG 23

PERSONAL DATA-PRIVACY ACT OF 1974
FLYING HISTORY REPORT (FAR) AS OF 94 AUG 23 PCN SAC02-605

INQUIRY

NAME: MOLE, ROBERT E SSAN: [REDACTED] GRADE: COL 3PT: 6 FAC: 7 ASD/DATE: 7A/54 MAY
RDE: 1 CND: SAC WING: 0092 PRI CRW POS: P PRI ACFT: 6052H UNIT: 0325 BASE: FAIRCHILD AFB

CAREER TOTALS

CREW POSITION	PILOT
PRIMARY TIME	1308:07
SECONDARY TIME	1214:09
INSTRUCTOR TIME	1714:03
EVALUATOR TIME	0:00
OTHER TIME	308:11
TOTAL TIME	3430:29
STUDENT TIME	2241:00
OTHER US MIL TIME	0:00
FOREIGN MIL TIME	0:00
CIVILIAN TIME	343:03
COMBAT TIME	0:00
CHIT SUPPORT TIME	673
TOTAL SORTIES	152
COMBAT SORTIES	0
CHIT SUPPORT SORT	71
DATE FIRST FLOWN	21 FEB 18
DATE LAST FLOWN	94 MAY 09
COMMAND PLT TIME	0:00
GRAND TOTAL	3654:29

63

PREPARED 94 AUG 23

PERSONAL DATA-PRIVACY ACT OF 1974
INDIVIDUAL FLIGHT RECORD (PA)

AS OF 94 AUG 23

PCN SAC02-GC8

INQUIRY

NAME: MCLELLAN ROBERT S
RUE: 1 CND: SACSSAN: [REDACTED]
WING: 0092 BWGRADE: COL
UNIT: 0385 BSPEI: CEA POS: P
ACFT: OPTOC: FAIRCHILD AFB

ELI-IC:

PEI: ACET: E052

MOS: DATE TAIL DUTY
NUMB: POSH

PRI

SEC

INSTA

EVAL

OTHER

TOTAL

SORTIES

NITE

INST

INST

RES

FORR

N/S

CODE

CODE

DATE

UPDATED

SUMMARY AIRCRAFT

SIMULATOR

0.6

0.0

0.0

0.0

1.4

2.0

1

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

NAGG80: 54235

END PAGE 5

PERSONAL DATA-PRIVACY ACT OF 1974

PERSONAL DATA-PRIVACY ACT OF 1974

PREPARED 94 APR 29

INDIVIDUAL FLIGHT RECORD (PA)

AS OF 94 APR 29

PCN SAC02-608

ANNUAL

NAME: WOLFF ROBERT E
RJET: 1 CND: SAC

SSAN: [REDACTED]
WING: 0092 BW

GRADE: COL
UNIT: 0325 BS

PRI CRW POS: P
ACFT OPLOC: FAIRCHILD AFB

PRI ACFT: B052H

MDS	DATE	TAIL	DUTY	PRI	SEC	INSTR	EVAL	OTHER	TOTAL	SORTIES	NITE	INST	SIM	RES	CORR	N/S	DATE
		NUMB	POSN										INST	RES	CODE		UPDATED
B052H	931007	003	UP	1.4	0.3	0.0	0.0	0.0	1.7	1	0.0	0.0	0.0	0.0			931011
	931019	026	UP	1.5	0.2	0.0	0.0	0.0	1.7	1	0.0	0.0	0.0	0.0			931103
	931118	013	UP	1.0	0.0	0.0	0.0	0.0	1.0	1	0.0	0.0	0.0	0.0			931103
	931118	013	UP	1.0	0.0	0.0	0.0	0.0	1.0	1	0.0	0.0	0.0	0.0			931103
	940104	012	UP	1.0	0.0	0.0	0.0	0.0	1.0	1	0.0	0.0	0.0	0.0			940103
	940308	051	FP	2.0	0.0	0.0	0.0	0.0	2.0	1	0.0	0.0	0.0	0.0			940309
	940322	044	FP	1.0	0.0	0.0	0.0	0.0	1.0	1	0.0	0.0	0.0	0.0			940321
	940322	044	FP	1.0	0.0	0.0	0.0	0.0	1.0	1	0.0	0.0	0.0	0.0			940321
	940322	044	FP	1.0	0.0	0.0	0.0	0.0	1.0	1	0.0	0.0	0.0	0.0			940321
T037B	931120	524	XP	0.0	0.0	0.0	0.0	0.0	0.0	1	0.0	0.0	0.0	0.0			931121
SUMMARY	AIRCRAFT			16.8	10.7	0.0	0.0	5.7	33.2	11	1.3	3.8	3.0				
	SIMULATOR			0.0	0.0	0.0	0.0	0.0	C.0	0	0.0	0.0	0.0				

RECORD OF EVALUATION

NAME, LAST- FIRST- MIDDLE INITIAL AND SSAN

HOLLAND, ARTHUR A. [REDACTED]

TYPE AIR-CRAFT	TYPE OF EVALUATION	DATE COMPLETED	QUALIFICATION LEVEL (COMMAND)	TYPE AIR-CRAFT	TYPE OF EVALUATION	DATE COMPLETED	QUALIFICATION LEVEL (COMMAND)
B52G	Initial Qual Qual/Inst	5 Mar 76	Q-1 (SAC)	-----	ARRIVED 92 BMW, FAIRCHILD	AFB- JAN 89	
B52G	Flt Sim	14 May 76	Q-1 (SAC)	B52H	Requal/Instrum Instructor	16 Feb 89	Q (SAC)
B52G	No-Notice	14 Jun 76	Q-1 (SAC)	B52H	Qualification Instrument	10 Jul 90	Q(SAC)
B52G	Qual/Inst	22 Dec 76	Q-1 (SAC)	B52H	SAC Stan Eval Qual. Instrum.	6 Sep 91	Q(SAC)
B52H	Spot	13 May 77	Q-1 (SAC)	B52H	Qual/ Instrument	14 Jan 93	Q (ACC)
B52H	CPT	17 May 77	Q-1 (SAC)	B52H	MSN/QUAL/ INSTMT	25 Feb 94	1 (ACC)
B52H	Qual	31 Jan 78	1 (SAC)				
B52H	CPT	5 Jun 78	1 (SAC)				
B52H	No-Notice	6 Aug 78	Q (SAC)				
B52H	Initial/CPT Instructor	19 Jan 79	Q (SAC)				
B52H	Initial Instructor	28 Feb 79	Q (SAC)				
B52H	CEVG No-Notice	5 Jun 79	Q (SAC)				
B52H	CPT	4 Feb 80	Q (SAC)				
B52H	Qualification/ Instrument	26 Mar 80	Q (SAC)				
B52H	Pre- Standardization	12 May 80	Q (SAC)				
B52H	CEVG Inst/ Qualification	15 Sep 80	Q (SAC)				
B52H	CPT	12 Jan 81	Q (SAC)				
B52H	Qual/Inst	24 Jul 81	Q (SAC)				
B-52G	Qual	29 Jan 82	Q (SAC)				
B-52G	CPT	28 Apr 82	Q (SAC)				
B-52G	Instrument	1 Sep 82	Q (SAC)				
B-52G	Qual/Inst	22 Feb 83	Q (SAC)				
B-52G	CPT	14 Apr 83	Q (SAC)				
B-52G	Requal/Inst	18 Nov 83	Q (SAC)				
B-52G	CPT	20 Jun 84	Q (SAC)				
B-52G	Qual/Inst	5 Dec 84	Q (SAC)				

CERTIFICATE OF CREW QUALIFICATION

DATE COMPLETED
25 Feb 94

I. EXAMINEE IDENTIFICATION		
NAME (Last, First, Middle Initial)	GRADE	SSAN
Holland, Arthur A.	Lt Col	[REDACTED]
ORGANIZATION AND LOCATION	ACFT/CREW POSITION	ELIGIBILITY PERIOD
325 BS, Fairchild AFB WA	B-52H/IP	Jan - Jun 94

II. QUALIFICATION				
GROUND PHASE			FLIGHT PHASE	
EXAMINATION/CHECK	DATE	GRADE	MISSION/CHECK	DATE
Closed Book	1 Feb 94	100(S)	MSN/QUAL/INSTMT	16 Feb 94
Open Book	1 Feb 94	100		
INSTMT	25 Feb 94	100		
CPT	14 Feb 94	1		
QUALIFICATION LEVEL		RESTRICTION (Explain in Comments) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	ADDITIONAL TRAINING	
QUALIFIED	UNQUALIFIED		DUE DATES N/A DATE ADDITIONAL TRAINING COMPLETED	
1				
EXPIRATION DATE OF QUALIFICATION 31 July 1995				

COMMENTS (If more space is needed, continue on reverse)

III. CERTIFICATION							
#	TYPED NAME AND GRADE	ORGANIZATION	CHECK			SIGNATURE	DATE
			CONCUR	DO NOT CONCUR	REMARKS		
1	FLIGHT EXAMINER Jay P. Slaughenhaupt, Maj	92 OG			X	<i>Jay P. Slaughenhaupt</i>	25 Feb 94
2	REVIEWING OFFICER Arthur A. Holland, Lt Col	92 OG	X			<i>Arthur A. Holland</i>	1 Mar 94
3	FINAL APPROVING OFFICER William E. Pellerin, Col	92 OG	X			<i>William E. Pellerin</i>	14 MAR 94

I CERTIFY that I have been briefed and understand the action being taken this date.

DATE 15 Mar 94	TYPED NAME AND GRADE OF EXAMINEE Arthur A. Holland, Lt Col	SIGNATURE <i>Arthur A. Holland</i>
-------------------	---	---------------------------------------

IV. Examiner's Remarks:

- A. Mission Description:** Lt Col Holland's annual inflight evaluation was conducted on a conventional profile training sortie consisting of a cell departure and join-up, two on three receiver air refueling to include a boom envelope demonstration on AR-7A/B, low altitude TA/EVS flight in IR-302A, multiple low altitude weapon releases in the Saylor Creek range and concluded with all required traffic pattern activity at Fairchild.
- B. Discrepancies:** None.
- C. Recommended Additional Training:** None.
- D. Additional Comments:** All instructor items were flawlessly accomplished. Noteworthy were his timely and appropriate instruction and general airmanship.

AERONAUTICAL ORDER (PA)
AVIATION SERVICE

ANGE AVIATION SERVICE CODE FROM 2A

ENTITLEMENT: ACIP
IS NOT AFFECTED

ME: HOLLAND ARTHUR A
EW POSITION: PILOT
NG: 0092 BMW
CATION: FAIRCHILD AFB

GRADE: LTC SSAN: [REDACTED]

ORGANIZATION: 0325 BMS

OFFICE SYMBOL: 325CCE

QUIRED TO PERFORM FREQUENT AND REGULAR FLIGHTS: YES
QUIRED TO PERFORM PARACHUTE DUTIES : NO

C: 3A FAC: 3 ASD: 10 MAR 71 OSD: 28 JAN 71 OFDA: 174

MARKS:

EFFECTIVE DATE: 10 MAR 87

TERMINATION DATE: 27 JAN 96

THORITY: AFR 60-1 PARAGRAPH 2-3

REQUEST DATE: 10 MAR 87

GNATURE ELEMENT OF ORDERS AUTHENTICATING OFFICIAL:
R THE COMMANDER

DEPARTMENT OF THE AIR FORCE
HQ 92D CSG (SAC)
FAIRCHILD AFB WA 99011-5000


LURIE F. MOFFATT MSGT, USAF
IEF, OPS SYS MGT BRANCH.

STRIBUTION: C

AERONAUTICAL ORDER NUMBER: 0299

INTEGRAL PHYSIOLOGICAL TRAINING RECORD

(For officers this record will be kept as a permanent part of AF Form 846, "Aircrew Standardization/Evaluation Records." For airmen this record will be kept as a permanent part of the Field Medical Record.)

LAST NAME-FIRST NAME-MIDDLE INITIAL HOLLAND, ARTHUR A.			GRADE 2/Lt MAJ	SSAN [REDACTED]
TYPE OF TRAINING	PERCENT GRADE	AIR FORCE BASE	DATE	SIGNATURE OF PHYSIOLOGICAL TRAINING OFFICER
ORIGINAL PHASE	88	Columbus Ms.	14 Apr 71	WILLIAM L. TAYLOR, Capt, USAF, BSC
PASSENGER PHASE				
REFRESHER PHASE	SATIS	CARSWELL AFB, TX	25 Feb 74	GARY C. NISKALA, LT, USAF, BSC
REFRESHER	97%	LITTLE ROCK AFB	13 JAN 1977	ROBERT J. FENTON, CAPT, USAF
Refresher	Satis	Ellsworth AFB, SD	19 Nov 79	PETER J. SEBERGER, MAJ, USAF
REFRESHER	SATIS	LITTLE ROCK AFB	22 Nov 82	Susan E. Richardson, 1LT, USAF, BSC
Refresher TTB	SATIS	Wiesbaden AB, Ge	19 Aug 86	JAMES E. FREEMAN, MAJ, USAF, BSC
REFRESHER (TTB)		FAIRCHILD AFB, WA	13 APR 89	QUINCY E. EDMONDS, CAPT, USAF
Refresher TTB		Fairchild AFB, WA	19 Dec 91	JAMES W. LASSWELL, 2LT, USAF, BSC
EJECTION SEAT TRAINER		Columbus Ms.	31 Mar 71	WILLIAM L. TAYLOR, Capt, USAF, BSC
PRESSURE SUIT TYPE				
PRESSURE SUIT REFRESHER				
PARA. SAIL		Columbus Ms.	14 Apr 71	WILLIAM L. TAYLOR, Capt, USAF, BSC

REMARKS

29 Mar 71 T-37 Procedural Training Columbus AFB, Ms.
 29 Mar 71 HBU-2B/A Indoc.
 9 Aug 71 T-38 Procedural Training Columbus AFB, Ms.

TO: (HDSM/UNIT Scheduling Officer) or (Cdr/Duty Sect) 92 OSS/DOTF		FROM: 92D MEDICAL GROUP (ACC) FAIRCHILD AFB WA 99011		DATE 03 AUG 93
LAST NAME - FIRST NAME - MIDDLE/INITIALS / HOLLAND, ARTHUR			GRADE LTC	SSN [REDACTED]
RATING/FLYING OR SPECIAL OPERATIONAL DUTY PILOT	ASC 3A	ACTIVE FLYING [X]YES []NO	ORGANIZATION 92 DP GP	MAJCOM ACC

THE ABOVE INDIVIDUAL HAS BEEN FOUND (Check Appropriate Boxes):

☐ MEDICALLY RESTRICTED FROM FLYING OR SPECIAL OPERATIONAL DUTY (DNIF)

☐ RATED OFFICER: ILLNESS OR INJURY WILL NOT BE RESOLVED WITHIN 180 DAYS.

☐ NONRATED OFFICER OR ENLISTED PERSONNEL: ILLNESS OR INJURY WILL NOT BE RESOLVED WITHIN 90 DAYS.

☐ MEDICALLY CLEARED FOR FLYING OR SPECIAL OPERATIONAL DUTY FOLLOWING AN ILLNESS OR INJURY.

☒ MEDICALLY CLEARED FOR FLYING DUTY FOLLOWING:

☐ INITIAL MEDICAL
EXAMINATION

☒ PERIODIC MEDICAL
EXAMINATION

☐ INITIAL CLEARANCE
(This Base)

☐ AIRCRAFT
MISHAP

☐ REQUIRED TO WEAR VISION CORRECTION DEVICES WHILE PERFORMING FLYING OR SPECIAL OPERATIONAL DUTY.

ACTUAL DATE FOUND DNIF _____	ESTIMATED DURATION OF DNIF _____	DATE FOUND MEDICALLY CLEARED _____	DAYS DNIF THIS ILLNESS/INJURY _____
---------------------------------	-------------------------------------	---------------------------------------	--

REMARKS

61930804

DATE MEDICAL CLEARANCE EXPIRES 30 SEP 94	MEDICAL EXAM MAY BE ACCOMPLISHED IN/AFTER _____ JUL 94
TYPED OR PRINTED NAME & GRADE OF FLIGHT SURGEON	SIGNATURE <i>[Signature]</i> DATE 03 AUG 93

I CERTIFY that I have been notified and understand the above actions and recommendations.

☐ ☐ DO ☒ DO NOT wear contact lenses while performing flying or special operational duty.

SIGNATURE OF FLYER OR INDIVIDUAL <i>[Signature]</i>	DATE 03 AUG 93
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PREPARED 94 AUG 23

PERSONAL DATA-PRIVACY ACT OF 1974
FLYING HISTORY REPORT (FAR)

AS OF 94 AUG 23

PCN 5A002-605

INQUIRY

NAME: HOLLAND ARTHUR A
RJET: 1 CMD: SAC WING: 0092

SCAN: [REDACTED]
PRI CRW POS: P

GRADE: LTC
PRI ACFT: 9052H

RPT: 6
FAC: 3

UNIT: 0325

CEFA: 174
BASE: FAIRCHILD AFB
ASS/DATE: 2A/22 MAR

AIRCRAFT M/D/S		D052H		S8052H		KC135A		AIRCRAFT TOTALS		B052G		B052E		SME052H	
FLY DTY	CERT CODE	EPDX	EE	EPDX	EE	NC DATA	P	NO DATA	P	NO DATA	P	NO DATA	P	NO DATA	P
DATE QUALIFIED	39 DEC 09	39 DEC 09	33 DEC 06	79 JAN 17	90 SEP 14	74 MAR 26	81 OCT 07	72 OCT 17	84 DEC 03	73 MAY 17	90 APR 20	84 FEB 12	84 FEB 12	84 FEB 12	84 FEB 12
DATE FIRST FLOWN	39 DEC 09	39 DEC 09	33 DEC 06	79 JAN 17	90 SEP 14	74 MAR 26	81 OCT 07	72 OCT 17	84 DEC 03	73 MAY 17	90 APR 20	84 FEB 12	84 FEB 12	84 FEB 12	84 FEB 12
DATE LAST FLOWN	39 DEC 09	39 DEC 09	33 DEC 06	79 JAN 17	90 SEP 14	74 MAR 26	81 OCT 07	72 OCT 17	84 DEC 03	73 MAY 17	90 APR 20	84 FEB 12	84 FEB 12	84 FEB 12	84 FEB 12
TOTAL TIME	3612.0	3612.0	3612.0	3612.0	3612.0	3612.0	3612.0	3612.0	3612.0	3612.0	3612.0	3612.0	3612.0	3612.0	3612.0
PRIMARY TIME	1364.4	1364.4	1364.4	1364.4	1364.4	1364.4	1364.4	1364.4	1364.4	1364.4	1364.4	1364.4	1364.4	1364.4	1364.4
SECONDARY TIME	1457.7	1457.7	1457.7	1457.7	1457.7	1457.7	1457.7	1457.7	1457.7	1457.7	1457.7	1457.7	1457.7	1457.7	1457.7
EVALUATOR TIME	112.4	112.4	112.4	112.4	112.4	112.4	112.4	112.4	112.4	112.4	112.4	112.4	112.4	112.4	112.4
PRIMARY NIGHT	124.4	124.4	124.4	124.4	124.4	124.4	124.4	124.4	124.4	124.4	124.4	124.4	124.4	124.4	124.4
PRIMARY SIM INST	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4
COMBAT SUPPORT TIME	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
COMBAT SUPPORTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL SORTIES	535	535	535	535	535	535	535	535	535	535	535	535	535	535	535

CAREER TOTALS

CREW POSITION		PILOT		COPILOT		EVALUATOR		OTHER		TOTAL		TOTAL		TOTAL	
PRIMARY TIME	1592.9	1592.9	1592.9	1592.9	1592.9	1592.9	1592.9	1592.9	1592.9	1592.9	1592.9	1592.9	1592.9	1592.9	1592.9
SECONDARY TIME	1009.2	1009.2	1009.2	1009.2	1009.2	1009.2	1009.2	1009.2	1009.2	1009.2	1009.2	1009.2	1009.2	1009.2	1009.2
EVALUATOR TIME	1472.4	1472.4	1472.4	1472.4	1472.4	1472.4	1472.4	1472.4	1472.4	1472.4	1472.4	1472.4	1472.4	1472.4	1472.4
OTHER TIME	258.1	258.1	258.1	258.1	258.1	258.1	258.1	258.1	258.1	258.1	258.1	258.1	258.1	258.1	258.1
TOTAL TIME	5021.0	5021.0	5021.0	5021.0	5021.0	5021.0	5021.0	5021.0	5021.0	5021.0	5021.0	5021.0	5021.0	5021.0	5021.0
STUDENT TIME	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0
FLYING TIME	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
COMBAT TIME	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1
COMBAT SUPPORT TIME	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
COMBAT SORTIES	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9
COMBAT SUPPORT SORT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DATE FIRST FLOWN	39 DEC 09	39 DEC 09	39 DEC 09	39 DEC 09	39 DEC 09	39 DEC 09	39 DEC 09	39 DEC 09	39 DEC 09	39 DEC 09	39 DEC 09	39 DEC 09	39 DEC 09	39 DEC 09	39 DEC 09
DATE LAST FLOWN	39 DEC 09	39 DEC 09	39 DEC 09	39 DEC 09	39 DEC 09	39 DEC 09	39 DEC 09	39 DEC 09	39 DEC 09	39 DEC 09	39 DEC 09	39 DEC 09	39 DEC 09	39 DEC 09	39 DEC 09
COMMAND PLT TIME	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

GRAND TOTAL 5275.3

HA233C: 54235

PREPARED 94 AUG 23

PERSONAL DATA-PRIVACY ACT OF 1974
INDIVIDUAL FLIGHT RECORD (PA)

AS OF 94 AUG 23

PCN SAC2-608

NAME: HOLLAND, ABHUS A
RJET: 1

SSAN: [REDACTED]
WING: 0092 BW

GRADE: LT
UNIT: 0325 BS

PRI CRW POS: P
ACFT OPLOC: FAIRCHILD AFB

PRI ACFT: 2032

INQUIRY

MS	DATE	TAIL NUMD POSN	DUTY	PRI	SEC	INST	EVAL	OTHER	TOTAL	SORTIES	NITE	INST	SIM- INST	RES	CORR CODE	N/S CODE	DATE UPDATED
SCS2H	940617	026	IP	0.0	0.5	0.5	0.0	0.0	1.0	1	0.0	0.0	0.0				940620
SUMMARY	ASCCRAFT			0.0	0.5	0.5	0.0	0.0	1.0	1	0.0	0.0	0.0				
	SIMULATOR			0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0				

PCN SA002-608

PRI ACFT: B052

THE
AT
P

[illegible]

RECORD OF EVALUATION

NAME, LAST- FIRST- MIDDLE INITIAL AND SSAN

MC GEEHAN, MARK C., [REDACTED]

TYPE AIR-CRAFT	TYPE OF EVALUATION	DATE COMPLETED	QUALIFICATION LEVEL (COMMAND)	TYPE AIR-CRAFT	TYPE OF EVALUATION	DATE COMPLETED	QUALIFICATION LEVEL (COMMAND)
T38A	INSTRUMENT	28 FEB 80	Q (ATC)	-----	Assigned 92 BW, Fairchild		AFB WA-----
B52G	INITIAL QUAL/INSTM	15 SEP 80	Q (SAC)	B52H	REQUAL/MSN/ QUAL/INSTMT	3 Sep 93	1 (ACC)
-----	ASSIGNED 379	BMW (SAC)	-----				
B52G	SPOT	24 FEB 81	U (SAC)				
B52G	RECHECK	3 MAR 81	Q (SAC)				
B52G	CEVG NO-NOTICE	10 APR 81	Q (SAC)				
B52G	CPT	19 MAY 81	Q (SAC)				
B52G	QUAL/INSTM	25 AUG 81	Q (SAC)				
T-37	QUAL	26 OCT 81	Q (ATC)				
T-37	INSTRUMENT	18 NOV 81	Q (ATC)				
B52G	CPT	30 OCT 81	Q (SAC)				
B52G	NO-NOTICE	23 FEB 82	Q (SAC)				
T37B	QUAL	1 JUL 82	Q (ATC)				
B52G	QUAL/INSTM	28 SEP 82	Q (SAC)				
B52G	CPT	24 JAN 83	Q (SAC)				
T37B	INSTRUMENT	7 FEB 83	Q (ATC)				
B52G	CPT	4 APR 83	Q (SAC)				
B52G	INITIAL QUAL/INSTM	3 NOV 83	Q (SAC)				
B52G	NO-NOTICE	9 JUL 84	Q (SAC)				
B52G	WST	24 JAN 85	Q (SAC)				
B52G	QUAL/INSTM	21 FEB 85	Q (SAC)				
-----	ASSIGNED TO	43 BMW	-----				
B-52G	Requal/Instm	09 Nov 87	Q (SAC)				
B-52G	Initial Instructor	26 Jul 88	Q (SAC)				
B-52G	Conventional Qual/Instrm	28 Apr 89	Q (SAC)				
B-52G	No-Notice	20 Feb 90	Q (SAC)				

CERTIFICATION CREW QUALIFICATION

DATE COMPLETED
3 Sep 93

I. EXAMINEE IDENTIFICATION

NAME (Last, First, Middle Initial) McGeehan, Mark C.	GRADE Maj	SSAN [REDACTED]
ORGANIZATION AND LOCATION 325 BS, Fairchild AFB WA	ACFT/CREW POSITION B-52H/TP	ELIGIBILITY PERIOD N/A

II. QUALIFICATION

GROUND PHASE			FLIGHT PHASE	
EXAMINATION/CHECK	DATE	GRADE	MISSION/CHECK	DATE
Closed Book	3 Sep 93	100 (S)	REQUAL/MSN/QUAL/INSTMT	26 Aug 93
Open Book	3 Sep 93	100		
INSTMT	29 Apr 93	98		
CPT	3 Sep 93	1		

QUALIFICATION LEVEL		RESTRICTION (Explain in Comments) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	ADDITIONAL TRAINING	
QUALIFIED	UNQUALIFIED		DUE DATES	
1			N/A	
EXPIRATION DATE OF QUALIFICATION 31 January 1995			DATE ADDITIONAL TRAINING COMPLETED	

COMMENTS (If more space is needed, continue on reverse)

III. CERTIFICATION

#	TYPED NAME AND GRADE	ORGANIZATION	CHECK			SIGNATURE	DATE
			CONCUR	DO NOT CONCUR	REMARKS		
1	FLIGHT EXAMINER Jay P. Slaughenhoupt, Maj	92 OG			X	Jay P. Slaughenhoupt	8 Sep 93
2	REVIEWING OFFICER Arthur A. Holland, Lt Col	92 OG	X			Arthur A. Holland	10 Sep 93
3	FINAL APPROVING OFFICER Michael G. Russell, Lt Col	325 BS	X			Michael G. Russell	13 Sep 93

I CERTIFY that I have been briefed and understand the action being taken this date.

DATE 28 OCT 93	TYPED NAME AND GRADE OF EXAMINEE Mark G. McGeehan, Maj	SIGNATURE
-------------------	---	---------------

FLIGHT EXAMINER REMARKS

Mission Comments - Sortie consisted of a cell departure as number two, air refueling on AR 10 SE, low level and bombing activity in the Cold Lake range in Canada, and concluded with pattern activity at Fairchild AFB. Mission planning was thorough with all aspects of the flight covered in detail. All ground operations were good. Takeoff and departure were excellent. The air refueling was with a Castle AFB CCTS crew in and out of some light clouds and turbulence. His basic air refueling was good. During the boom limits demonstration he initially had some slight problems due to the turbulence and random unannounced turns by the tanker. Once the tanker stabilized he performed all the limits very well. All low level TA/EVS and visual procedures were good, as was his bombing. His initial buffet demonstration was flawlessly performed. He did an especially good job on his required pattern activity. Only very minor airspeed deviations that did not detract from the overall flight were noted.

AERONAUTICAL ORDER (PA)
AVIATION SERVICE

CHANGE AVIATION SERVICE CODE FROM 2J

ENTITLEMENT: ACIP
IS NOT AFFECTED

NAME: MCGEEHAN MARK C

GRADE: MAJ SSAN: [REDACTED]

CREW POSITION: PILOT

WING: 0092 BW

ORGANIZATION: 0325 BS

OFFICE SYMBOL: DO

LOCATION: FAIRCHILD AFB

REQUIRED TO PERFORM FREQUENT AND REGULAR FLIGHTS: YES

REQUIRED TO PERFORM PARACHUTE DUTIES : NO

ASC: 2A FAC: 3 TSC: D ASD: 06 NOV 78 OSD: 31 MAY 78 OFDA:

REMARKS: ASC DATE BASED ON DDLDS IAW AFR 60-1.

EFFECTIVE DATE: 07 APR 93

TERMINATION DATE: 05 NOV 96

AUTHORITY: AFR 60-1 PARAGRAPH 2-3

REQUEST DATE: 08 JUL 93

SIGNATURE ELEMENT OF ORDERS AUTHENTICATING OFFICIAL:
OR THE COMMANDER

DEPARTMENT OF THE AIR FORCE
HQ 92D SUPPORT GROUP(ACC)
FAIRCHILD AFB WA 99011-5000

James D. Kennedy
JAMES D. KENNEDY, MSGT, USAF
CHIEF, OPS SYS MGT BRANCH

DISTRIBUTION: C

AERONAUTICAL ORDER NUMBER: 0226

INDIVIDUAL PHYSIOLOGICAL TRAINING RECORD

(THIS FORM IS SUBJECT TO THE PRIVACY ACT OF 1974. USE BLANKET PAS - DD FORM 2005)

For aircrew members this record will be kept as a permanent part of the Individual Flight Record (IFR) or the AF Form 846, Aircrew Training/Evaluation Records. For all other personnel this record may be kept as a permanent part of the Field Medical Record. Only Physiological Training Officers may authenticate entries. This record should accompany individual when reporting for refresher training courses.

LAST NAME - FIRST NAME - MIDDLE INITIAL McGeehan, Mark C.			GRADE O-7	SSAN [REDACTED]
TYPE OF TRAINING	AIR FORCE BASE	DATES		SIGNATURE OF PHYSIOLOGICAL TRAINING OFFICER
		TRAINING	EXPIRATION	
ORIGINAL	Vance AFB, OK	4 Sep 79	30 Sep 82	NICHOLAS D. BOLEY, CAPT, USAF, ETC
* PASSENGER	LOWERY AFB CO	23 Sep 74	30 Sep 77	JAY M. HOWARD, CAPT, USAF, BSC
REFRESHER	WRIGHT-PATTERSON AFB OHIO	05 OCT 1982	31 OCT 1985	HUGO A. RAMOS, MAJ, USAF
REFRESHER TTB	OFFUTT AFB, NE	4 Aug 86	31 Aug 89	EDWARD A. LUEDEKING, Maj, USAF
REFRESHER TTB	KADENA AB, JA	11 Jul 89	31 Jul 92	MICHELE L. SHAFFER, Capt, USAF, BSC
me REFRESHER	Columbus AFB MS	17 Dec 92	31 Dec 95	
PRESSURE SUIT ORIG: TYPE.				
PRESSURE SUIT REFR: TYPE.				
EJECTION SEAT TRAINER	Vance AFB, OK	22 Feb 79		NICHOLAS D. BOLEY, CAPT, USAF, ETC
PARA-SAIL	Vance AFB, OK	9 Apr 79		NICHOLAS D. BOLEY, CAPT, USAF, ETC

REMARKS

* Annotated from AF 702

MEDICAL RECOMMENDATION FOR FLYING OR SPECIAL OPERATIONAL DUTY
(THIS FORM IS SUBJECT TO THE PRIVACY ACT OF 1974 - Use blanket PAS DD Form 2005)

TO: (HCSM/UNIT Scheduling Officer) or (Cadr/Duty Sect) 92 OSS/DOTF		FROM: 92D MEDICAL GROUP (ACC) FAIRCHILD AFB WA 99011		DATE 16 DEC 93
LAST NAME - FIRST NAME - MIDDLE/INITIALS / - MCGEEHAN, MARK C			GRADE MAJ	SSN [REDACTED]
RATING/FLYING OR SPECIAL OPERATIONAL DUTY PILOT	ASC 2A	ACTIVE FLYING [X]YES []NO	ORGANIZATION 325 BMS	MAJCOM ACC

THE ABOVE INDIVIDUAL HAS BEEN FOUND (Check Appropriate Boxes):

☐ MEDICALLY RESTRICTED FROM FLYING OR SPECIAL OPERATIONAL DUTY (DNIF)

☐ RATED OFFICER: ILLNESS OR INJURY WILL NOT BE RESOLVED WITHIN 180 DAYS.

☐ NONRATED OFFICER OR ENLISTED PERSONNEL: ILLNESS OR INJURY WILL NOT BE RESOLVED WITHIN 90 DAYS.

☐ MEDICALLY CLEARED FOR FLYING OR SPECIAL OPERATIONAL DUTY FOLLOWING AN ILLNESS OR INJURY.

☒ MEDICALLY CLEARED FOR FLYING DUTY FOLLOWING:

☐ INITIAL MEDICAL
EXAMINATION

☒ PERIODIC MEDICAL
EXAMINATION

☐ INITIAL CLEARANCE
(This Base)

☐ AIRCRAFT
MISHAP

☐ REQUIRED TO WEAR VISION CORRECTION DEVICES WHILE PERFORMING FLYING OR SPECIAL OPERATIONAL DUTY.

ACTUAL DATE FOUND DNIF _____	ESTIMATED DURATION OF DNIF _____	DATE FOUND MEDICALLY CLEARED _____	DAYS DNIF THIS ILLNESS/INJURY _____
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REMARKS

20 Dec 93

DATE MEDICAL CLEARANCE EXPIRES 31 JAN 95	MEDICAL EXAM MAY BE ACCOMPLISHED IN/AFTER _____ NOV 94	
TYPED OR PRINTED NAME & GRADE OF FLIGHT SURGEON	SIGNATURE <i>[Signature]</i>	DATE 16 DEC 93
I CERTIFY that I have been notified and understand the above actions and recommendations.		
<input type="checkbox"/> DO <input checked="" type="checkbox"/> DO NOT wear contact lenses while performing flying or special operational duty.		
SIGNATURE OF FLYER OR INDIVIDUAL <i>[Signature]</i>		DATE 16 DEC 93

PCN SAC02-605

100-443881-1

T-3.6

GRAND TOTAL 3173.2

PERSONAL DATA-PRIVACY ACT OF 1974

PCN SA052-608

PR: aff: 6052H

UPD&TEO

SUMMARY	AIRCRAFT
60511	757
640526	127
16.5	
7.9	
153.8	
0.0	
15.2	
167.4	
34	
8.5	
7.0	
4.7	

PERSONAL DATA-PRIVACY ACT OF 1974

PREPARED 94 AUG 23 PERSONAL DATA-PRIVACY ACT OF 1974 INDIVIDUAL FLIGHT RECORD (PA) AS OF 94 AUG 23 PCN SA002-6C8

INQUIRY

NAME: MCCORMAN MARK C
RJET: 1
CMD: SAC
SCAN: [REDACTED]
WING: 0092 BW
GRADE: LTC
UNIT: 0325 BS
PRI CAL POS: P
FLT-ID: [REDACTED]
PRI ACFT: 3052H
DATE: [REDACTED]
TAIL DUTY
NUMB POSN
PRI SEC INSTR EVAL OTHER TOTAL SORTIES NITE INST SIM- CORR N/S DATE
SIMULATOR 0.0 0.0 0.0 0.0 0.0 0 0.0 0.0 0.0

RECORD OF EVALUATION

NAME, LAST- FIRST- MIDDLE INITIAL AND SSAN

HUSTON, KENNETH S.

TYPE AIR-CRAFT	TYPE OF EVALUATION	DATE COMPLETED	QUALIFICATION LEVEL (COMMAND)	TYPE AIR-CRAFT	TYPE OF EVALUATION	DATE COMPLETED	QUALIFICATION LEVEL (COMMAND)
B52D	Init Qual	10 Jul 79	Q (SAC)	B52H	Requal	7 Feb 90	Q(SAC)
ASSIGNED TO 43SW				B52H	Qualification	12 Jun 91	Q(SAC)
B52D	No Notice	12 Dec 79	Q (SAC)	B52H	Instructor/Qualification	14 Oct 92	1 (ACC)
B52D	Prestard'n Qualification	22 Apr 80	Q (SAC)	B52H	MSN/QUAL	15 Feb 94	1 (ACC)
B52D	Init Instr	4 Aug 80	Q (SAC)	B52H	Unit Complet.	29 Mar 94	1 (ACC)
B52D	CEVG		Q				
B52D	No Notice	2 Oct 80	Q (SAC)				
B52D	CEVG		Q				
B52D	Completion	9 Dec 80	Q (SAC)				
B52D	Init Qual	22 May 81	Q (SAC)				
B52D	No Notice	12 Dec 81	Q (SAC)				
B52D	Qualification	27 Apr 82	Q (SAC)				
B52D	1CEVG		Q				
B52D	No Notice	21 May 82	Q (SAC)				
ASSIGNED 319 BMW							
B52G	Qualification	24 May 83	Q (SAC)				
B52G	Initial Instructor	2 Jun 83	Q (SAC)				
B52G	1CEVG		Q				
B52G	No Notice IRN	29 Sep 83	Q (SAC)				
B52G	Unit IRN		Q				
B52G	Completion	19 Oct 83	Q (SAC)				
B52G	IRN		Q				
B52G	Qualification	20 Nov 84	Q (SAC)				
B52G	1CEVG IRN		Q				
B52G	Qualification	4 Dec 84	Q (SAC)				
B52G	Unit IRN		Q				
B52G	Completion	27 Dec 84	Q (SAC)				
-----ASSIGNED TO USAFA-----							
T-43A	INITIAL QUALIFICATION	15 AUG 86	Q (USAFA)				
T-43A	INITIAL INSTRUCTOR	24 OCT 86	Q (USAFA)				
T-43A	NO-NOTICE QUALIFICATION	18 FEB 87	Q (USAFA)				
T-43A	ANNUAL/COMB QUALIFICATION	19 Oct 87	Q (USAFA)				
T-43A	ANNUAL/COMB QUALIFICATION	25 OCT 88	Q (USAFA)				
-----ASSIGNED 92 BV, FAIRCHILD AFB WA-----							

CERTIFICATE OF CREW QUALIFICATION

DATE COMPLETED
29 Mar 94

I. EXAMINEE IDENTIFICATION

NAME (Last, First, Middle Initial) Huston, Kenneth S.	GRADE Maj	SSAN [REDACTED]
ORGANIZATION AND LOCATION 325 BS, Fairchild AFB WA	ACFT/CREW POSITION B-52H/IRN	ELIGIBILITY PERIOD Oct 93-Mar 94

II. QUALIFICATION

GROUND PHASE

EXAMINATION/CHECK	DATE	GRADE
Closed Book	29 Mar 94	100(S)
Open Book	24 Mar 94	100
AGM 86	24 Mar 94	100
NIRC	15 Nov 93	Comp

FLIGHT PHASE

MISSION/CHECK	DATE

QUALIFICATION LEVEL

QUALIFIED	UNQUALIFIED
1	

RESTRICTION (Explain in Comments)

☐ YES ☒ NO

ADDITIONAL TRAINING

DUE DATES
N/A

EXPIRATION DATE OF QUALIFICATION
31 July 1995

DATE ADDITIONAL TRAINING COMPLETED

COMMENTS (If more space is needed, continue on reverse)

III. CERTIFICATION

	TYPED NAME AND GRADE	ORGANIZATION	CHECK			SIGNATURE	DATE
			CONCUR	DO NOT CONCUR	REMARKS		
1	FLIGHT EXAMINER Peter A. Donnelly, Capt	325 BS			X	<i>Peter A. Donnelly</i>	29 Mar 94
2	REVIEWING OFFICER Arthur A. Holland, Lt Col	92 OG	X			<i>Arthur A. Holland</i>	30 Mar 94
3	FINAL APPROVING OFFICER Mark C. McGeachan, Lt Col	325 BS	X			<i>Mark C. McGeachan</i>	20 Apr 94

I CERTIFY that I have been briefed and understand the action being taken this date.

DATE 25 Apr 94	TYPED NAME AND GRADE OF EXAMINEE Kenneth S. Huston, Maj	SIGNATURE <i>Kenneth S. Huston</i>
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IV. Examiner's Remarks:

A. Mission Description. This form 8 documents completion of an ACCR 60-2 MSN/QUAL annual evaluation for a flight evaluation given on 15 Feb 94.

B. Discrepancies: None.

21 FEB 1994

AERONAUTICAL ORDER (PA)
AERONAUTICAL RATING

THE FOLLOWING INDIVIDUAL(S) IS/ARE AWARDED THE AERONAUTICAL RATING DESIGNATED.

NAME	GRADE	SSAN	AWARD	ORGN
HUSTON KENNETH S	MAJ	[REDACTED]	MASTER NAVIGATOR	0325

REMARKS: MEMBER MET REQUIREMENTS FOR ADVANCED RATING IAW AFR 60-13 PARA 2-9A,
TABLE 2-1 LINE 11.

EFFECTIVE DATE: 17 NOV 93

TERMINATION DATE: N/A

AUTHORITY: AFR 60-13 PARAGRAPH 2-9A

REQUEST DATE: 17 NOV 93

SIGNATURE ELEMENT OF ORDERS AUTHENTICATING OFFICIAL:
FOR THE COMMANDER:

DEPARTMENT OF THE AIR FORCE
HQ 92D SUPPORT GROUP (ACC)
FAIRCHILD AFB WA 99011-5000


JAMES D. KENNEDY, MSGT, USAF
NCOIC, FLIGHT RECORDS

DISTRIBUTION: C

AERONAUTICAL ORDER NUMBER: 0063

INDIVIDUAL PHYSIOLOGICAL TRAINING RECORD

(THIS FORM IS SUBJECT TO THE PRIVACY ACT OF 1974. USE BLANKET PAS - DD FORM 2005)

For aircrew members this record will be kept as a permanent part of the Individual Flight Record (IFR) or the AF Form 846, Aircrew Training/Evaluation Records. For all other personnel this record may be kept as a permanent part of the Field Medical Record. Only Physiological Training Officers may authenticate entries. This record should accompany individual when reporting for refresher training courses.

LAST NAME - FIRST NAME - MIDDLE INITIAL			GRADE	SSAN
Huston, Kenneth S.			O-1	[REDACTED]
TYPE OF TRAINING	AIR FORCE BASE	DATES		SIGNATURE OF PHYSIOLOGICAL TRAINING OFFICER
		TRAINING	EXPIRATION	
ORIGINAL	MATHER AFB, CA	25 Apr 78	30 Apr 81	DOUGLAS L. NELSON, CAPT, USAF, BSC
PASSENGER				
REFRESHER	MATHER AFB, CA	23 Feb 79	28 Feb 82	JAMES A. KEY, Major, USAF, BSC
REFRESHER	Kadena AB, JA	13 Jan 82	31 Jan 85	ROBERT E. GHERMAN, Maj, USAF, BSC
REFRESHER	15th PTF Kadena AB, JA	13 Jan 82	31 Jan 85	JEFFREY C. SVENSTEDT, 1LT, USAF, BSC
REFRESHER	ELLSWORTH AFB, SC	18 OCT 1984	1 OCT 1987	NEAL BAUMGARTNER, 1LT USAF BSC
REF/TTB	Peterson AFB, CO	21 July 87	31 July 90	JAMES W. WEISSMANN, Capt, USAF, BSC
TTB REFRESHER	PETERSON AFB, CO	22 JUN 89	30 JUN 92	PAUL D. FOWLER, 1LT, USAF, BSC
REF/TTB	Fairchild AFB, WA	7 May 92	31 May 95	KEVIN W. KOZLOWSKI, MAJ, USAF
PRESSURE SUIT ORIG: TYPE				
PRESSURE SUIT REPR: TYPE				
VERTIGON	Peterson AFB, CO	21 Jul 87	31 Jul 90	JAMES W. WEISSMANN, Capt, USAF
EJECTION SEAT TRAINER	MATHER AFB, CA	24 Apr 78		DOUGLAS L. NELSON, CAPT, USAF, BSC
PARA-SAIL	MATHER AFB, CA	2 Nov 78		DOUGLAS L. NELSON, CAPT, USAF, BSC
WET-DITCHING	MATHER AFB, CA	25 Apr 78		DOUGLAS L. NELSON, CAPT, USAF, BSC

REMARKS

T-37 Procedural Seat Training, Mather AFB, Ca, 20 Apr 78.

MEDICAL RECOMMENDATION FOR FLYING OR SPECIAL OPERATIONAL DUTY
(THIS FORM IS SUBJECT TO THE PRIVACY ACT OF 1974 - Use blanket PAS DD Form 2005)

TO: (HDSM/UNIT Scheduling Officer) or (Cmdr/Duty Sect) 92 OSS/DOTF		FROM: 92D MEDICAL GROUP (ACC) FAIRCHILD AFB WA 99011		DATE 15 SEP 93
LAST NAME - FIRST NAME - MIDDLE/INITIALS / HUSTON, KENNETH			GRADE MAJ	SSN [REDACTED]
RATING/FLYING OR SPECIAL OPERATIONAL DUTY NAVIGATOR	ASC 2A	ACTIVE FLYING [X]YES []NO	ORGANIZATION 325 BMS	MAJCOM ACC

THE ABOVE INDIVIDUAL HAS BEEN FOUND (Check Appropriate Boxes):

☐ MEDICALLY RESTRICTED FROM FLYING OR SPECIAL OPERATIONAL DUTY (DNIF)

☐ RATED OFFICER: ILLNESS OR INJURY WILL NOT BE RESOLVED WITHIN 180 DAYS.

☐ NONRATED OFFICER OR ENLISTED PERSONNEL: ILLNESS OR INJURY WILL NOT BE RESOLVED WITHIN 90 DAYS.

☐ MEDICALLY CLEARED FOR FLYING OR SPECIAL OPERATIONAL DUTY FOLLOWING AN ILLNESS OR INJURY.

☒ MEDICALLY CLEARED FOR FLYING DUTY FOLLOWING:

☐ INITIAL MEDICAL
EXAMINATION

☒ PERIODIC MEDICAL
EXAMINATION

☐ INITIAL CLEARANCE
(This Base)

☐ AIRCRAFT
MISHAP

☐ REQUIRED TO WEAR VISION CORRECTION DEVICES WHILE PERFORMING FLYING OR SPECIAL OPERATIONAL DUTY.

ACTUAL DATE FOUND DNIF _____	ESTIMATED DURATION OF DNIF _____	DATE FOUND MEDICALLY CLEARED _____	DAYS DNIF THIS ILLNESS/INJURY _____
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REMARKS

930915
[Signature]

DATE MEDICAL CLEARANCE EXPIRES 30 NOV 94	MEDICAL EXAM MAY BE ACCOMPLISHED IN/AFTER _____ >> SEP 94
TYPED OR PRINTED NAME & GRADE OF FLIGHT SURGEON Robert J. Grant, LtCol, USAF, MC	SIGNATURE <i>[Signature]</i> DATE 15 SEP 93

I CERTIFY that I have been notified and understand the above actions and recommendations.

I ☐ DO ☒ DO NOT wear contact lenses while performing flying or special operational duty.

SIGNATURE OF FLYER OR INDIVIDUAL <i>[Signature]</i>	DATE 15 SEP 94
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T-4.5

PREPARED 94 AUG 01

PERSONAL DATA-PRIVACY ACT OF 1974
FLYING-HISTORY-REPORT-(PA)

AS-OF-94 JUL 31

PCN-6A002-605

ANNUAL

NAME: HUSTON KENNETH S
RUE: 1 CMD: SAC WING: 0092

SSAN: [REDACTED]
PRI CRW POS: R

GRADE: LTC
PRI ACFT: B052H

RPI: 6
FAC: J
UNIT: 0325

OFDA: 182

ASG/DATE: 2A/90

APR-12

CAREER TOTALS

CREW POSITION	MAV	N/R	SWO
PRIMARY TIME	950.6	1278.6	6.0
SECONDARY TIME	0.0	0.0	0.0
INSTRUCTOR TIME	187.8	700.8	0.0
AVIATION TIME	47.0	91.4	0.0
STUDENT TIME	1185.3	2081.8	6.0
OTHER-US MIL TIME	104.3		
REIGN MIL TIME	0.0		
COMBAT SUPPORT TIME	0.0		
COMBAT SUPPORT SORT	0.0		
DATE FIRST FLOWN	85 MAR 08		
DATE LAST FLOWN	94 JUN 17		
COMAND PLT TIME			
GRAND TOTAL	3378.1		

T-4.7

NAAGSO: 94213

PAGE 58

PERSONAL DATA-PRIVACY ACT OF 1974

